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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

THE ELEMENTS OF SURGERY.

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LECTURE VII.—ON THE PRACTICE OF ANTISEPTIC SURGERY.

An Example—Duties of Instrument Clerk, Dresser, and Spray Clerk—Ligatures—Drainage Tubes—Catgut and Horsehair Drains—Closing Wound—Deep Sutures—Button Sutures—Application of Deep and Superficial Dressings—Change of Dressing—When to be done—Evidences of Failure—Septic Cases—Examples—Chloride of Zinc—Boric Lotion—Iodoform—Use of the Guard—Gutta Percha.

Let us now consider the application of these materials, and let us imagine the removal of a tumor from the region of the groin as one would see this operation performed in a public hospital with plenty of assistants. As this is one of the regions where the surgeon's care and ingenuity are specially taxed in keeping his wounds aseptic, it serves as a good example of the style of dressing required.

On the surgeon's right stands the table with instruments and dressings. The gentleman who has charge of these arranges his instruments in a flat, shallow porcelain tray containing enough one-to-twenty carbolic lotion to cover them. A sheet of india-rubber may be laid in the bottom of the tray, so that the bistouries can not have their edges turned by coming in contact with the hard porcelain. The duties of the instrument clerk comprise attention to the surgical cleanliness of the forceps, saws, and other necessaries. These must be free from dirt, and their teeth thoroughly purified. Needles, sutures, and instruments must be carefully carbolized and passed to the surgeon through the cloud of spray.

On the surgeon's left is located the table with sponges, basins, and lotions. The dresser here removes as many sponges as he may require from the jar of one-to-twenty in which they are kept soaking, and places them for use in a basin half filled with one-to-forty lotion. A second basin with a similar quantity of one-to-twenty is next provided, and into this he puts a couple of towels and one sponge.

The spray clerk takes his position where his spray can throw a suitable cloud over the field of operation without incommoding the surgeon, obstructing the view of the spectators, or obliging the patient to respire the antiseptic. His duty is to replenish the spray-bottle with one-to-twenty as required; to see that doors and windows are closed, so that no draught may undo all by blowing the spray cloud from off the wound. If ether is used as the anesthetic we must give it a wide berth, for fear of the flame of the lamp causing an explosion.

The patient being now quite anesthetized, the dresser hands the surgeon the basin with the one-to-twenty. The skin over and around the tumor is then well scrubbed with the sponge; the two towels, after having the superfluous lotion squeezed out of them, are laid the one over the genitals and the other so as to overlap the blanket which covers the upper part of the patient's body. In this way a sort of antiseptic basis is provided, over which the spray plays, and on which we may lay sponges and

instruments with safety during the operation. If necessary the pubis may be shaved; and this, together with a preliminary purification, may be done before the patient leaves the ward.

The surgeon now washes his hands in the lotion—not a mere dip, as if he were afraid to carry the smell away with him, but a thorough cleansing, especially around the flexures and finger nails. The basin of one-to-twenty is then held during the operation close to the vicinity of the wound, so that the assistants may purify their hands or any instruments should they inadvertently be carried beyond the area of the spray.

The spray is now turned on, and the operation proceeds. The sponges are passed as required, wrung out of one-to-forty lotion; and as the dresser receives the dirty ones he squeezes them into a pail standing at hand, then washes them in the one-to-forty lotion, and wrings them dry as wanted. When the sponges are required very quickly a relay may lie on the towel covered by the spray; but on no account should we have a store of them lying exposed to the air before passing. One simply courts failure by so doing.

The ligatures may be cut as required. The surgeon is not at liberty to have a stock attached to his button-hole or to carry a dozen in his mouth, and yet claim to carry out most rigid antiseptic precautions.

The tumor has now been removed; the bleeding checked by ligatures, which are cut short. It remains to close the wound, prevent tension, and keep it aseptic.

Tension is abolished by the use of Chassaignac's drainage-tubes, catgut or horsehair drains. The tubes are introduced to the bottom of the wound. Their number and size can only be learned by experience; but the drainage can not be too free. Their outer ends must be flush with the level of the wound, and the two loops of silk turned back at right angles over the lips of the incision, and thus the tubes can not slip back into the cavity they drain. It is sometimes preferable to introduce the tubes after stitching up. The tubes act mainly by capillarity, in such cases the serum finding its way out between the clot and

the walls of the tube; hence there is no advantage in keeping the tubes clear. The disadvantage of the tube is that we must dress the wound at times solely to shorten or remove the tubes, when otherwise things need not have been disturbed.

The catgut drain requires more care and discrimination in its use. It is serviceable in cases where we feel there will not be sufficient stimulus of any kind to cause suppuration; for while it drains away serum readily it can not convey pus. The catgut is slowly disintegrated and absorbed by the tissues, and thus requires no assistance in its removal; hence those dressings are avoided which we must make in order to shorten or remove tubes when those are employed.

The drains should be formed of eight or twelve ply of gut tied in the middle; and here we stitch it to the bottom of the wound with gut also, so that it may not be floated up to the top, acting as a mere superficial drain, and leaving material to accumulate in the deeper parts and cause tension. The two free ends of the drain may be brought out at the extremities of the incision or divided into three or four parts, which are brought out between the stitches.

Tubes and drains may be combined, as the surgeon sees fit; or he may use the tubes for the first two dressings, then insert drains instead, and look no more at the wound until such time as he hopes to find all healed, with the unabsorbed ends of the catgut lying on the top of the cicatrix. This one may readily carry out whenever the discharge is purely serous and small in quantity.

He now proceeds to close the wound. If it should be large and gaping one gets splendid results by the use of deep sutures, stitches of relaxation, or button sutures. A stout silver wire is carried through the integument about two inches or so beyond the incision, brought out at the wound, reintroduced and pulled out through the skin at a similar distance on the other side. The end of the wire has a flat leaden button or plate attached to it, and as the wire is now pulled tight and the superfluous wire with the needle attached cut off a second button is slipped on

and the wire secured to it. These buttons hold the lips of the wound together in the same manner as one's fingers would act. Immediate union is now favored by the introduction of numerous secondary stitches of coaptation. For these horse-hair is preferable on account of its strength, elasticity, pliability, cheapness, and the ease with which it can be removed. It will be found advantageous to double the first twist of the reef-knot, and thus there will be no danger of the stitch relaxing while the final twist is being made. If a single hair is not strong enough we may use two or three together.

It is hardly necessary to add that all the sutures and needles must be duly purified, nor must the ends of the ligatures, etc. be allowed to touch any septic body as they are passed to the surgeon in the spray.

The whole operation has now been conducted under the spray antiseptically. We have now to maintain this aseptic condition. For this purpose the dressing is applied. It may be prepared beforehand. The surgeon lays a strip of protective, newly dipped in the one-to-forty carbolic lotion, over the lips of the wound so that they are completely covered; and with advantage we may also lay small pieces over the end of the drains, silk of tubes, and button stitches, these latter pieces being to prevent the gauze from adhering.

We now apply the deep dressing; and to understand its value we must bear in mind that dry carbolic gauze is not antiseptic. It gives off its acid at ordinary temperatures in such a small quantity and so slowly that it is not even aseptic; hence were we to apply dry gauze to recent wounds they would certainly in many cases putrefy; but we get over this difficulty by the use of a wet deep dressing consisting of three or four ply of gauze wrung out of one-to-forty lotion, laid over the protective, and extending for three or four inches beyond it all round. In this way we have destroyed any organisms which may have fallen on the surface of the gauze, the aseptic discharge is received by the active carbolic acid in the deep dressing, is there rendered antiseptic, and by the time it reaches the large superficial dressing

of dry gauze, which has now to be applied, the heat of the body has liberated so much of the acid that there is now no danger of the discharge putrefying.

After the deep dressing has been put on we may pad any hollows with dry gauze, and perhaps put a special pad in that region toward which the discharge will gravitate. Over this is then laid the large superficial dressing, consisting of eight ply of gauze, with a sheet of mackintosh interposed between the seventh and eighth layers. One should note that the glazed surface must always be turned inward, looking toward the skin, and that it is slightly smaller than the square of the gauze, so that it can not protrude beyond it, for fear of so infecting the discharge or screening it from view.

When the discharge soaks through the gauze it is at length arrested by the mackintosh. It then makes its way toward the margin of the dressing, taking with it in its course so much carbolic acid that any organisms adherent to the polished surface of the mackintosh are destroyed.

If there be a very copious flow of discharge it is possible that all the carbolic acid may be washed out, and hence the necessity for changing a dressing always for the first time within twenty-four hours after the operation. The dressing is secured by turns of a gauze bandage; these, from the manner in which they cling and adhere, from their softness and pliability, being very serviceable.

Whenever the four corners of the dressing are secured then the spray may cease. Further security is gained by fastening the bandages to the four corners of the dressing with safety-pins, and then the bandages to one another only, where they cross. On no account allow a pin to perforate the mackintosh.

For restless patients, and in cases which require dressing but once a week or less, a broad elastic bandage over all gives both patient and surgeon much comfort, as any chance of the dressing slipping is thus almost completely avoided.

The patient now lies undisturbed for the next four and twenty

hours, when we change the dressing for the first time. We now require a deep and superficial dressing as before, and the dresser has also in readiness protective, a basin containing one-to-forty lotion, deep dressing, and two rags, one of fine texture known as a guard, and a second coarser to swab with.

The spray is seen to be in order and in position. The surgeon now removes the pins and elastic, cuts the gauze bandage, and washes his hands in the lotion; the patient, if necessary, assisting meanwhile by pressing a hand on the dressing to keep it steadily in position. The spray is turned on, and the surgeon proceeds to lift up that corner of the dressing which is nearest the spray, so that the cloud may be directed into the angle between the dressing and the skin. The deep dressing and protective are now similarly removed, and we may gently wipe up any serum which may obscure our view of the wound. Should we desire to ascertain if there is retained discharge we cover the wound with the wet guard and then make use of gentle pressure with the fingers. The guard effectually protects the wound should the spray cease working or should any current of air turn the cloud aside; and again, it is a matter of the greatest moment to have only purified air in the vicinity when we relax pressure, as a regurgitation into the wound must ensue. The new protective is now dipped and applied; the deep and superficial dressings follow as before.

And now the question arises, When are we to dress again? This is settled either by length of time (a dressing should not be left on for more than about twelve days) or by appearance of discharge at the edge of the dressing. The discharge is best seen as a stain on the clean draw-sheet on which the patient lies, and the nurse has strict injunctions never to change the draw-sheet until it has been examined by the surgeon at daily visit.

It will be found that we no longer require to dress frequently; that intervals of three, four, and more days may elapse, until finally we find all healed. The event of any abnormal circumstance, as a rise of temperature, pain, or discom-

fort, even although minus discharge, will oblige us to dress without delay.

At these future dressings it will be necessary to attend to the drainage-tubes and stitches. The tubes should be shortened to the extent of about a quarter or half an inch, according as they are seen to be pushed out by the contraction of the tissues around them; and frequently they must not only be shortened, but we must substitute others of smaller caliber in their place, or use catgut drains—points which can only be ascertained by experience. The removal of stitches should present no difficulty. As regards button sutures, the surgeon seizes one button with his forceps and gently pulls it upward, at the same time passing a strong pair of scissors beneath, so that as soon as the slightly curved portion of the wire has been withdrawn from the skin he may divide it. The other button and wire may now be withdrawn easily and painlessly.

When we open an abscess we must proceed as before to purify the skin and surroundings. The incision made should only be large enough to admit the drainage-tube or the finger previously carefully cleansed, if it be deemed necessary to explore the cavity. Protective is not necessary.

In the case of psoas and lumbar abscesses, where the patients are long in bed, we must shorten the tubes slowly and carefully, never losing patience. A puckering in of the lips of the wound points to a cicatrization of the tissues, and indicates that all is going well.

It may now be noticed that never once have we flushed our wounds with carbolic acid; never once have we employed a syringe. Our whole aim has been to admit as little as possible of the irritating antiseptic to our wounds. We use it merely to act as external agents, our wounds being left, as it were, subcutaneous, the protective keeping out the carbolic acid and the dressing acting like the healthy skin in preventing the entrance of putrefactive organisms.

What are the symptoms and signs that enable us to say we have failed in our object? The symptoms are many; individ-

ually no one is absolutely certain; collectively they are so. Of signs we have but one, and this one plus a few of the symptoms enables us to say that our wounds are or are not septic.

The chief symptoms shown by the patient are those of general or local constitutional disturbance, such as rise of temperature, inflammation of the wound, and suppuration; and as regards the dressing, we at once note that it stinks, and that the protective has become blackened by the sulphuretted hydrogen of putrefaction acting on the litharge with which the protective is prepared.

The occurrence of *all* the above would at once lead us to state that our purpose had failed; the occurrence of any *one* of them would only rouse our suspicion that all was not well, and would lead us to search for the special cause at work.

Thus the rise of temperature might yield to a dose of castor oil; the local redness and pain might subside on dividing a tight stitch which was giving rise to tension; the suppuration might cease on removing some foreign body causing irritation by its presence, such as a scale of dead bone; the stink of the dressing would come to an end when we applied a little salicylic acid; and the blackening of the protective might be due to the use of india-rubber drainage-tubes prepared with sulphur.

Any of the above symptoms combined with the one certain sign—the presence of *living, moving bacteria*—at once enable us to state that we have failed, when the sooner we resort to open treatment with antiseptics the better. We may ascertain the presence of bacteria best by examining a little discharge removed at the time of dressing from the *under*surface of the protective; for here we find the organisms, if any are present, more lively and so better marked than under the gauze. A power of three hundred and fifty is enough; and we need not be disturbed by the appearance of clustered oil-granules or indulge in a vain hunt for micrococci, since it has been abundantly demonstrated that the latter have nothing whatsoever to do with putrefaction. We look only for well-marked bacteroidal rods. See paper by W. Watson Cheyne, Lancet, May 17, 1879.

Septic cases we may divide into two classes — recent, embracing fractures and wounds which, having been exposed to the air, are liable to become putrid before long; and secondly, chiefly joint-diseases, old standing, with broken skin and sinuses.

As regards the former, let us imagine a fracture of the leg due to a crush. The bone protrudes and is dirty; the accident occurred a few hours ago; hemorrhage has been controlled by means of a tourniquet. We expose the wound under the spray, and after securing the vessels with carbolized gut at once attempt to convert the compound into a simple fracture. The skin is purified with one-to-twenty lotion, which is also injected into the recesses of the wound by means of a gum-elastic catheter attached to a syringe. In this way the wound is thoroughly washed out; but care must be taken not to use the syringe forcibly, otherwise we may injure healthy tissue, the acid may be sent up the sheaths of tendons, and so sloughing will ensue. The protruding piece of bone is scrubbed with a nail-brush dipped in one-to-five alcoholic solution, so that the dirt which has been rubbed into it may be rendered completely inert. The bones are now laid in position, drainage-tubes inserted, and the dressing put on, the limb being left with the most suitable form of retentive apparatus applied externally. Within the next forty-eight hours we shall learn, from the behavior of the wound, whether our efforts have been successful or not. Future dressings follow the ordinary rules.

In scalp-wounds we purify the wound and surrounding skin with one-to-twenty carbolic acid, cutting the hair close, insert a catgut drain, and stitch up. Such cases are remarkable for their rapidity of healing, the troubles of erysipelas and inflammation being quite unknown among a class of out-patients who are not the most attentive.

Let us now deal with an old-standing putrid-joint case complicated with sinuses. Our first duty is to remove all the putrid tissues we can, and this we endeavor to attain by scraping out the loose lining granulations from the sinuses with one of Volk-

mann's sharp spoons. In this way we hope to get rid of the unhealthy septic material, and leave behind only sound aseptic tissue. The sinuses are now injected with the chloride of zinc solution, and the operation continued as if with unbroken skin, a final purification with the zinc salt being made use of before the dressing is applied.

In dealing with ulcers we first purify the skin with one-to-twenty lotion, and then the ulcer itself is rubbed with a piece of lint saturated with the chloride of zinc. A piece of protective of the same shape as the sore, and about an eighth of an inch larger all round, is then dipped in boric lotion to purify it, and applied; while over this again we lay two layers of boric lint wrung out of the lotion. The lint must overlap the protective for an inch all round at the very least, and in cases where a copious discharge is anticipated a special pad of the lint may be applied at the most dependent part to receive it. A bandage from below upward completes the dressing, and the patient keeps the limb at rest until such time as discharge shows itself. Then a new dressing is applied. We wash the sore and adjoining skin with boric lotion, dip the protective and lint in clean lotion, and proceed as before.

The chloride of zinc causes a good deal of smarting and uneasiness, but the subsequent abolition of pain and smell is so marked that should the ulcer again become putrid patients request a second application of the solution.

We may also purify our ulcers by sprinkling them with powdered iodoform after washing with one-to-twenty carbolic lotion, and dress as above. The pain caused by the zinc may be avoided and the ulcer purified by using several poultices of boric lint; that is to say, apply the layers of moist lint and over them a large sheet of gutta-percha, and then bandage. Continue this treatment for some days, and then dress with protective and lint.

Boric acid being a very mild, non-volatile, and non-penetrating antiseptic, is only suited for superficial wounds. It is, however, the least irritating antiseptic we possess.

The application of antiseptics in cases of fistula, etc. will be stated in the course of lectures.

In private practice one finds the carrying out of antiseptic detail even less troublesome than in hospital. The spray is not so liable to get out of order, since it never changes hands. We do not make use of so many assistants; nor yet have we the convenience and benefit of bystanders to consider.

The surgeon may carry in his spray-bag a small supply of crystals of carbolic acid, so that he has practically a great quantity of lotion in a very small space. He has also sponges; but the dressings and lotion are usually found in readiness at the patient's house. While the patient is being anesthetized one gets the spray in order, arranges instruments and dressings. The spray during the operation stands on a small table in a convenient position, and requires but little attention. Should the carbolic lotion in the spray-bottle become exhausted, or should it be necessary to shift the position of the spray, then the surgeon merely lifts his guard out of the lotion, covers the wound with it, and so puts things to rights. Instruments may lie on a large plate or in a tumbler of water, their points being saved contact by a cake of india-rubber laid over the bottom. Sponges of course are taken in hand by an assistant or nurse.

The future dressings are managed as in hospital. A daily visit is not required, since by means of a post-card the patient may send word to the surgeon should any discharge appear or discomfort be experienced.

PUERPERAL FEVER AND SEPTICEMIA.

BY T. C. QUINN, M. D.

It is unfortunate, but true, that under the term "puerperal fever" two distinct affections are confounded — puerperal fever and puerperal septicemia — diseases which differ both in their origin and modes of attack. Puerperal fever originates from epidemic causes, contagion, and infection; puerperal septicemia from "nosocomial malaria, autogenetic infection, and direct inoculation." In puerperal fever the woman is frequently attacked before or during labor; in puerperal septicemia such is never the case unless the fetus is dead and decomposed. That the two diseases are not identical is further shown by the fact that erysipelas often attacks the infants of mothers sick with puerperal fever; and it is probable that the erysipelas originates directly from the maternal disease, because it occurs frequently in the country and under the most favorable hygienic influences. This does not hold true in regard to puerperal septicemia.

That puerperal fever originates from an epidemic influence, is evident from the fact that there is a peculiar poison existing in the atmosphere just before and during an outbreak of puerperal fever, and all surgical operations upon the female genital organs tend to produce pelvic cellulitis and peritonitis. Dr. Barker says that Drs. Sims and Emmet can predict an epidemic of puerperal fever at Bellevue by this tendency. Another evidence is that it appears almost as frequently in towns where there are neither hospitals nor dissecting-rooms, and in the country, as in cities exposed to such influence. Again, it visits the country at different intervals, like all other epidemics. The definite and characteristic course of the disease proves it to arise from a specific cause, though it is claimed by some of the most eminent physicians of Europe and America that *any* fever following labor is puerperal fever. If there is a specific cause we certainly can not agree with the opinions held by some that typhus, typhoid, and scarlet fevers may produce puerperal fever;

for there is no evidence in the whole history of diseases to prove that one specific virus can be transformed into another. No doubt that typhus, typhoid, and scarlet fevers have followed labor and carried off their thousands; but the destroying agents in such instances have been typhus, typhoid, etc. The doctrine that the virus of any or all contagious diseases may generate puerperal fever leads to this, that the puerperal state has the marvelous power of transforming these various diseases into puerperal fever, which can not be allowed. True, temperament, constitution, and atmospheric influence may modify the symptoms and cause different types of the same disease; nevertheless scarlatina will be scarlatina, whether simplex, anginose, or malignant; smallpox will be smallpox, whether varioloid, variola, or confluent. If an epidemic disease is prevailing in a malignant form it may generate puerperal septicemia, but *never* puerperal fever, if the latter originates from a specific poison of its own and is controlled by the same immutable law that governs all other specific poisons, which we believe is the case.

The question of the infection of puerperal fever is of vital importance to every practitioner. If, as has been held, the poison is so potent that no effort at cleanliness and disinfection will destroy it, and we are liable to carry death and woe to every household, it would be far better that all cases of labor be left to nature, unassisted by physicians, as fewer would probably die from want of assistance than from puerperal fever carried by the doctor. There are many instances given where it appears to have tracked the footsteps of physicians. Dr. Gooch gives a case of a practitioner with a large obstetrical practice who lost so many patients from puerperal fever that he determined to deliver no more women for some time; that his partner should attend in his place. After a month he resumed his practice, but the first patient he attended died of the disease. The experience of Dr. Reid, of England, was equally remarkable; also that of Dr. Rutter, of Philadelphia, of whom all have heard. Against this view we have the testimony of Dr. Meigs and others. Dr. Lusk, while an epidemic of puerperal fever prevailed in one of

the New York hospitals, spent two or three hours every day in the wards, and yet had not a single case in private practice. The obstetrical ward a short time afterward was converted into a surgical ward, where several capital operations were performed without a single case of septicemia or erysipelas. In view of all this conflicting testimony the obstetricians should certainly use every precaution in the way of cleanliness and disinfection, at least, to prevent the spread of this terrible disease.

The evidence is very conclusive that puerperal septicemia may originate from the absorption of decomposed animal matter that impregnates the air of hospitals, through a fresh-abraded or wounded surface caused by labor or carried by the finger of the attending physician, and also from the uterine vessels absorbing a decomposed clot, portion of retained placenta, or the lochial discharge when the uterus is in a relaxed state; for a relaxed condition of the uterus is the cause of nearly all cases of puerperal septicemia originating from self-infection. May not the fact that two diseases have been constantly confounded under the name of "puerperal fever" explain most of the difference of opinion with regard to infection and contagion?

New Vienna, Clinton County, Ohio, is a village of some eight hundred inhabitants, situated in a fertile, well-improved section of country. Though one of the highest points of Southern Ohio, this region is in fact a plateau, and a great part of the land lies quite flat. For some years past drainage has received considerable attention, but much remains to be done in this direction. Malarial diseases have always prevailed extensively. The remittent and continued types have gradually taken the place of the intermittent, until the latter is now comparatively rare; while continued malarial fever—the so-called typho-malarial—is frequently observed. Now it is a remarkable fact that this region of country, from its first settlement to the present, has suffered from repeated epidemics of puerperal fever. The first physician who located at New Vienna, thirty years ago, had to contend against such a scourge, and his efforts were futile. For a period of several months every woman that was confined

died of the disease. From that time to this the physicians of New Vienna have met occasionally with puerperal fever and septicemia—both diseases generally confounded under the one name. Personally since 1871 I have treated, if correct in diagnosis, five cases of puerperal septicemia and seven of puerperal fever. The histories of these cases are briefly as follows:

Case I. Sallie E., single, aged seventeen, primipara, confined January 4, 1871; labor short and easy; sat up next day with door open and wind and snow blowing in; six hours afterward her lochial discharge stopped; in twelve hours she had a rigor. When I saw her two days afterward she resembled a person with inflammatory rheumatism, without redness or swelling of the joints; the moving of either arms or legs producing very severe pain. She had neither pain nor tenderness in the bowels; temperature very high (record lost); pulse 140; respiration 60 and irregular; tongue dry; thirst great; mind remarkably bright; delirium before death. Treatment—opium, quinia, and whisky. Died fourth day after rigor.

Case II. Mrs. C., aged thirty-two; fifth pregnancy; confined May 31, 1872; labor short and easy. The day following she was given two tablespoonfuls of salts, which produced twenty or thirty evacuations, causing the lochial discharge to stop. Twenty-four hours afterward she had a rigor, followed by high fever. I saw her two days after, and found her with precisely the same symptoms as the first case. Temperature very high (record lost); pulse 130; respiration 60 and irregular; tongue dry; thirst great; very nervous; mind bright; became delirious before death. Treatment the same as the first case. Died the fourth day after she was attacked.

In April, 1873, erysipelas prevailed to a limited extent, and there were a number of cases of puerperal fever in the practice of a physician in a neighboring town five miles east of New Vienna.

Case III. Mrs. T. S., aged twenty-eight; fourth pregnancy; confined April 23, 1873; labor short and easy. Twenty-four hours after she had a rigor. I was called immediately; found

temperature 104°; pulse 120; respiration 40 and sighing; acute pain in the bowels, and very tender on pressure; tongue clean; thirst great; very nervous; face flushed; lochial discharge suppressed. Treatment—Quinia gr. iij every four hours; Norwood's tinct. veratrum vir. gtt. iv every two hours; hot turpentine to the bowels. In eight hours temperature 100°; pulse 60; respiration 20; nausea; no pain, but bowels very tender and slightly tympanitic. Continued quinia the same, and increased or decreased the veratrum, so as to keep the pulse below 80. Recovered in about three weeks.

Case IV. Mrs. R. B., aged twenty-eight; primipara. Was called to visit this lady some days before her confinement, while still attending Mrs. T. S. of case three. Complained of soreness in bowels; motions of child caused severe misery, preventing rest and sleep. Confined May 16, 1873; labor very tedious; used forceps. Appeared to do very well for forty-eight hours, when she had a severe rigor. Saw her soon after; temperature 105°; pulse 130; respiration 60 and irregular; tongue clean; thirst very great; acute pain in the bowels, which were tympanitic and very tender, as they had been from time of labor; lochia unaltered; face flushed; and very nervous. Treatment—Quinia gr. iij every four hours; Norwood's tinct. veratrum vir. gtt. iv every two hours; hot turpentine to the bowels until it blistered. Twenty-four hours afterward all the symptoms growing worse. At that time I was very timid with veratrum, and knew nothing of the effects of large doses of quinia. Dr. A. T. Johnson was called; suggested large doses of opium combined with calomel; but she continued to grow worse. The last day of her illness she vomited a great deal of dark fluid that looked like and had the odor of decomposed blood. Mind clear, and talked cheerfully to the last. Died on the fourth day after the attack.

Case V. Mrs. B., aged nineteen, primipara; confined December 30, 1874; labor easy. Lochial discharge stopped in thirty-six hours; twelve hours after had a very severe rigor. Saw her two hours after; temperature 105°; pulse 140; respiration 60

and irregular; tongue clean; thirst very great; very nervous; face flushed; and no pain any where. Treatment—Norwood's tinct. veratrum vir. gtt. v every hour; quinia gr. iij every four hours. 8 o'clock P. M.—temperature 106°; pulse could not be counted; respiration 60 and very irregular. Increased the veratrum one drop every hour. At 10 o'clock gave ten drops; at 11 o'clock the same. At 12 o'clock temperature 106°; pulse 100; respiration 40. Gave quinia gr. xv; reduced veratrum to gtt. v every two hours. Sunday, 6 o'clock A. M.—temperature 102°; pulse 68; respiration 20. Continued to improve until Wednesday, 3 o'clock P. M.—temperature 99°; pulse 72; respiration 16; appetite good; said she was well. Dropped the veratrum; gave quinia gr. iij every six hours. Thursday, 9 o'clock A. M.—temperature 102°; pulse 76; respiration 20. Said she felt very well. Ordered veratrum gtt. iv every two hours until the fever subsided, and quinia gr. iij every three hours. Felt so confident that the medicine would reduce the temperature that I did not see her again that day. Friday, 9 o'clock A. M.—temperature 106°; pulse 140; respiration 40 and very irregular; tongue dry and mind wandering; complained of pains in the arms. Learned that her mother had given her but one dose of the medicine after I left the day before. She continued to grow worse, and died the twelfth day after she was attacked.

Case VI. Mrs. H., aged 26, fourth pregnancy; confined December 31, 1874; labor the quickest and easiest that she ever had. Thirty-six hours after her lochial discharge ceased, and in twelve hours she had a rigor. Saw her soon after; temperature 106°; pulse 140; respiration 60 and sighing; tongue natural; mind clear; face flushed; no pain nor tenderness in the bowels. Treatment—quinia gr. xv; Norwood's tinct. veratrum vir. gtt. x every hour. Six hours after, nausea; temperature 101.5°; pulse 60; respiration 36. Quinia gr. iij every three hours; veratrum gtt. ij every two hours, with orders if pulse ran up to 80 to give it every hour and increase one drop every time till the pulse came down. She recovered in three weeks.

Case VII. Mrs. H. S., aged twenty-six, third pregnancy; con-

fined April 13, 1875; labor easy. Lochial discharge stopped on the fifth day, and forty-eight hours after she had a rigor. Saw her a short time after; no pain nor tenderness in the bowels; temperature 103°; pulse 96; respiration 36. Treatment—quinia gr. iij every three hours, and Norwood's tinct. veratrum vir. gtt. iv. every two hours until the pulse fell to 72. She recovered in about two weeks.

The last of February and the first of March, 1877, I treated four cases of scarlatina and three of erysipelas. During this time I attended three women in labor. One of them lived in the same house where I had a case of scarlatina; but all got along well, without any bad results whatever. It was not until ten days after I had ceased to treat erysipelas and scarlatina that a case of puerperal fever occurred in my practice, though it was noticed in nearly all cases of labor from January that there was too high an elevation of temperature.

Case VIII. Mrs. H. T., aged twenty-three, primipara; confined March 14, 1877; labor favorable. Forty-eight hours after she had a rigor, lasting three hours. Saw her soon after; temperature 105°; pulse 130; respiration 40 and sighing; face flushed; tongue clean; acute pain in the uterus, which was large and tender; lochia not suppressed when attacked. Treatment—quinia gr. x; Norwood's tinct. veratrum vir. gtt. v every two hours; hot bran and camphor poultice to the bowels. Saw her again on the 17th at 8 o'clock A. M.; she had vomited one hour previously; temperature 100°; pulse 96; respiration 20; no pain, but the uterus large and very tender. Reduced the dose of veratrum to gtt. ij, quinia to gr. iij every three hours, with orders to increase the veratrum one drop every dose if the temperature raised. The uterus remained large and tender for a week, and gave pain when urinating; but severe pain in the uterus only when the temperature was elevated above 102°, which was soon reduced by the quinia and veratrum. Recovered in about three weeks.

Nineteen days after I attended another labor, with no trouble following, and four days following I had my ninth case of fever.

CASE IX. Mrs. S., aged twenty-five, primipara; confined April 8, 1877; child born and placenta delivered before I arrived; made no examination except to feel the pulse. Forty-eight hours after she had a severe rigor, followed by fever and pain in the uterus, which was large and tender. Lochial discharge not affected when first attacked. When seen soon after the rigor temperature 104°; pulse 100; respiration 36; tongue clean. Treatment—quinia gr. iij every two hours; hot bran and camphor poultice to the bowels. This was a very mild case, and recovered in about ten days.

Ten days after I attended another labor, at which nothing unusual occurred, and six days following had my tenth case of fever.

CASE X. Mrs. A. B., aged twenty-two, primipara; confined April 24, 1877; labor very tedious; hip presentation; and forty-eight hours after had a very severe rigor. Saw her soon after; temperature 105°; pulse 130; respiration 40 and irregular; tongue clean; face flushed; hand trembled so that it was almost impossible to hold a glass of water while drinking; thirst very great; very acute pain in the uterus, which was large and tender. Lochia not affected at time of attack. Treatment—hypodermic morphia gr. $\frac{1}{6}$; quinia gr. iij every three hours; Norwood's tinct. veratrum vir. gtt. v every two hours; hot bran and camphor poultice to the bowels. April 28th, 7 o'clock A. M.—temperature 100°; pulse 96; respiration 36 and irregular; no pain; uterus large and tender; gave acute pain to urinate. Continued same treatment. 6 o'clock P. M.—temperature 104.5°; pulse 110; respiration 40 and still irregular; lochial discharge and milk stopped; suffering acute pain in the bowels. Gave hypodermic morphia, gr. $\frac{1}{6}$; continued quinia the same; increased the veratrum until the pulse fell to 72. This case lasted six weeks; and if quinia was dropped for twelve hours pain would return and the temperature run up to 104° or 105°, and had to resort to veratrum to reduce it. I never gave over three grains of quinia at a dose. I believe if I had given ten or fifteen grains she would have recovered sooner.

CASE XI. Mrs. P., aged twenty, primipara; confined July 5, 1877; labor easy. Seventy hours following she had a severe rigor which lasted four hours. Case seen at 6 o'clock P. M., soon after; temperature 105°; pulse 130; respiration 60 and sighing; tongue clean; face flushed; severe pain in uterus, which was large and tender; gave much pain to urinate; lochia and milk stopped with rigor. Treatment—quinia gr. iij every three hours; Norwood's tinct. veratrum vir. gtt. v every two hours. Seen again on the 9th at 7 o'clock A. M.; just vomited; temperature 101°; pulse 60; respiration 36; no pain since midnight; urinated without much difficulty; uterus large and very tender; lochia and milk stopped. Wet the bowels with fl. ext. belladonna every four hours, and applied a poultice of bran and camphor; reduced the veratrum to gtt. iij. 12 o'clock noon—temperature 104°; pulse 130; respiration 60 and irregular; worse in every respect. Gave gr. xv of quinia, veratrum gtt. iij, fl. ex. ergot gtt. x every three hours. 6 o'clock P. M.—temperature 100°; pulse 72; respiration 20; uterus not so large nor tender; lochial discharge returning. From this on I only gave quinia when the temperature ran above 102°, and then in ten-grain doses. She recovered in about two weeks. She had always been delicate, and had suffered for years from purulent nasal catarrh.

Attended another case of labor sixteen days after. Twelve days from this had my twelfth case of fever.

CASE XII. Mrs. J., aged nineteen, primipara; confined July 2, 1877; had been complaining several days, but when labor actually commenced it was short and favorable. Forty-eight hours after had a rigor. Saw her at 6 o'clock A. M., soon after the rigor; temperature 105°; pulse 130; respiration 60 and irregular; severe pain in the uterus, which was large and tender; lochia not suppressed at time of attack. Treatment—quinia gr. xv; tincture veratrum gtt. iij; fl. ext. ergot gtt. x every three hours; bran and camphor poultice. 12 o'clock noon—temperature 100°; pulse 60; respiration 36; no pain; uterus not so large, but very tender. Continued the veratrum and

ergot, and quinia gr. v every four hours. Her temperature never ran above 102°. Recovered in about ten days.

After the first case I quit wearing gloves, changed clothes before attending on a case of labor, washed my hands in soap and water, and used a strong solution of carbolic acid every time I made examinations, which were as few as possible. Now did I carry the poisons of erysipelas, puerperal fever, or scarlatina from one to another? If the physicians of New Vienna carry these poisons of erysipelas, scarlatina, or septicemia to their patients, why do not the physicians of Hillsboro, ten miles distant, do the same? They have had experience in repeated epidemics of scarlatina and diphtheria in their most malignant forms, and have met with erysipelas as frequently as we have here, yet they have no experience with puerperal fever or septicemia. One of the physicians of Hillsboro, who has had a large obstetrical practice for the last twenty years, told me that he had never seen a case of puerperal fever or septicemia, and he took no precautions whatever while treating erysipelas or scarlatina.

I believe cases one, two, five, six, and seven were septicemia produced from the absorption of the lochia. My reasons for this conclusion are: The lochia was suppressed in all before they were attacked; they had neither peritonitis nor metritis; the symptoms resembled rheumatism; and there was no erysipelas in the country. It has been proved that erysipelas and puerperal fever are closely associated, if not identical in their origin. Cases three, four, eight, nine, ten, eleven, and twelve were, in my opinion, puerperal fever, from the fact that the lochial discharge was not suppressed before the attack, and they all had peritonitis and metritis, and erysipelas was prevailing at the time. In the fourth case metritis appears to have existed before confinement.

It should have been stated that during the winter and spring of 1876 and 1877 there were several cases of puerperal fever and septicemia in the practice of both the other physicians of New Vienna.

In regard to the treatment of puerperal fever and septicemia,

as there is no specific for either disease, no remedy yet discovered that will neutralize the peculiar poisons which produce these affections, the treatment must be based on the indications offered by the symptoms. The temperature generally runs very high in both, causing congestion of all the excretory organs, soon followed by parenchymatous degeneration of the heart, lungs, and kidneys; and as the blood-poison and high elevation of temperature tends to a rapid decomposition of the blood the indications would seem to be to reduce the temperature at the very onset and relieve the congested condition of the excretory organs, thereby enabling them to eliminate the poison, and giving nature a chance of restoring the system to health. The remedies that have succeeded best in my hands in reducing the temperature and circulation are quinia and veratrum in large doses. Quinia will generally, if given in large enough doses, reduce the temperature to the natural standard or nearly so, and at the same time neutralize any malaria that may be in the system. Veratrum will almost invariably reduce the pulse to sixty per minute, and the temperature generally falls to its normal standard under its influence. When the temperature and circulation are reduced the pain and inflammation will soon subside.

I do not claim these remedies to be specifics, neither do I believe that they will work miracles; but from my experience I feel confident that they will control the symptoms and induce to a favorable termination in a greater number of cases than any other remedies yet given. With our limited knowledge of the action of medicines and the pathology of the disease we have to make the best use of the actual means at our command, "for theoretical notions and fond hopes will not help our patients."

It is claimed by many that vaginal and intra-uterine antiseptic injections will prevent and cure puerperal septicemia if used as soon as the lochial discharge becomes offensive. This treatment is recommended by the same men who hold that the least taint of septic matter on the hand will inoculate your patient, and that the poison is so potent that no disinfectant will destroy it. If this be true, what good will disinfecting the

vagina or uterus do? Again: what benefit can be derived from a vaginal or intra-uterine injection after the lochia becomes offensive? If there is an abraded or lacerated surface caused by labor it will granulate before the lochia becomes offensive; and granulating wounds can not absorb septic matter. If it is to wash away a portion of retained placenta or clot it would be useless, for if we can produce firm contraction of the uterus it will throw off all poison substances and close the uterine vessels so that they can not absorb septic matter. Ergot will nearly always produce this effect without the danger attending intra-uterine injections. Dr. Barker says that intra-uterine injections may be valuable in a limited number of cases. He gives two instances—one where it was his conviction that death was produced by the injection, and life barely saved in the other. Even *vaginal* injections are fraught with danger. I have treated two cases of metritis where I am sure it was produced by vaginal injections. My experience with *vaginal* injections in puerperal septicemia and fever has not been very favorable. It gave pain in every case except one, and I could perceive no benefit in that. Lusk and Parry found that vaginal injections gave pain and aggravated the symptoms in nearly every case, and entirely discarded them.

NEW VIENNA, O.

CONGENITAL DISLOCATION OF THE WRISTS.

BY J. H. POOLEY, M. D.,

Professor of Surgery in Starling Medical College, Columbus, Ohio.

Of all the abnormalities which are found to exist at birth, none are more important or interesting than those which are called congenital dislocations. These curious affections are cursorily mentioned by some of the older writers on medicine, but all that is really important in the literature of the subject is confined to our own times.

Among the varieties of congenital dislocation, that of the hip, or coxofemoral articulation, stands foremost, as being both the most common and the most important. Accordingly we find more in literature upon it than upon all the other forms put together; indeed several very complete monographs have been published on the subject, the best known of which, at least among American readers, is that of Dr. Carnochan, of New York. Dr. Sayre has also an excellent chapter on the subject in his Orthopedic Surgery.

Dislocations of the wrist are among the rarest of the congenital affections of this kind, so rare indeed that their very existence is unknown to many and denied by others. Under such circumstances it becomes no less than a duty for any one observing such a case to place it upon record for the aggrandizement of professional literature and the guidance and instruction of others. The principal references to this subject which are generally accessible are R. W. Smith, A Treatise on Fractures in the Vicinity of Joints, and on Certain Forms of Accidental and Congenital Dislocations, Dublin, 1854. pp. 238 *et seq.*, and Hamilton on Fractures and Dislocations.

Robert Smith gives two well-marked and perfectly-observed cases of his own, with plates and dissections of the affected articulation, which are by far the most complete and important on record. He opens his chapter on this subject with the analysis of a case the history of which is curious in the highest degree. It is a case reported by Cruveilhier in his Anatomie Pathologique as a case of traumatic dislocation of the wrist—an injury so rare when unaccompanied by fracture as to be denied by Dupuytren and other surgeons, although subsequently-reported cases leave no doubt as to its possibility. This very case to which we refer was analyzed with great care by Dupuytren, who endeavored to prove, accepting it as a traumatic case, that it had been accompanied with fracture or at least *diastasis* of the radius. To this already celebrated case Mr. Smith once more invites attention, and apparently settles definitely its true character for the first time by placing it in the category of congenital dislocations.

To this case of Cruveilhier's and the two of Smith's Guerin adds five imperfectly described; Manigues one, included by courtesy rather than in strictness of classification, as in it there was such excessive malformation that the bones of the carpus placed laterally projected between the bones of the forearm; and Gross makes a passing mention of having seen a lateral displacement in a young infant.

To these ten cases I now add another, in some respects more interesting than any of them, though it wants the completeness of a dissection. Mr. Brodhurst, in the fourth volume of Holmes's System of Surgery, first edition, page 822, says, "Excessive flexions of the wrist and elbow are by some understood as dislocations; these positions are due to muscular contractions alone; congenital dislocations of these joints are always associated with malformations or monstrosities" — a statement which shows a singular want of acquaintance with the subject on which he is writing; for in one of Mr. Smith's cases there was no undue contraction, and in neither was there any malformation except of the forearm.

My case, now to be related, is still more free from these complications.

Mrs. Finley, native of Ireland, aged thirty-three — a short, stout woman—presents, though in every other respect perfectly well formed, the following peculiarities of both wrist-joints. She never met with any injury to these joints, nor were they ever the seat of any disease. She remembers when she was eight years old being set to milk the cows, and that this labor, if long persisted in, gave her great pain in the wrists, owing to their peculiar conformation. At present they give her scarcely any trouble, neither interfering with delicate or laborious occupations. She is quite an adept at embroidery and fine needlework, of her skill in which she is quite proud, and does all her own work for a family of three children, including washing; and though the wringing, which she does by hand, may be taken as a fair test of the strength of the wrists, she is able to get through even with the heaviest pieces, though she admits that much of it

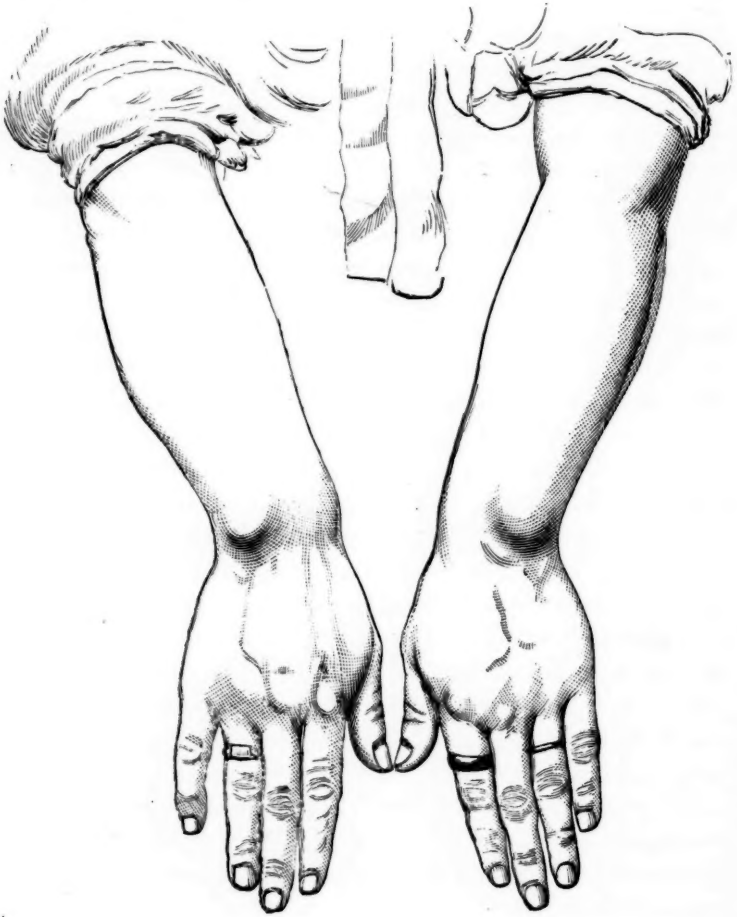
tires her wrists, as one would think it might under any circumstances. Her forearms are conspicuously short; they measure from the point of the olecranon to the styloid process of the ulna eight and a quarter inches or its equivalent in metric measurement, and are both exactly of the same length. For the sake of comparison I measured the forearms of over a dozen adults, male and female, taken promiscuously, and found the average of the measurements to be nine and three quarters inches. The length of the radius is seven and a half inches; that of the hand six and a quarter inches. Each wrist presents the characteristic appearance of dislocation of the carpus forward. On the posterior or outer surface there is an unnatural prominence, formed by the projection of the articular ends of the bones of the forearm, principally of the ulna, which forms a prominence three fourths of an inch in height. This is slightly more marked on the left side. On the palmar surface there is a similar projection, but not so abrupt, formed by the unnatural position of the carpus. The head of the ulna seems to be larger than natural, while that of the radius is considerably smaller. Of course the actual condition of the carpal bones can not be made out. The extension of the wrists is somewhat limited; it can not be carried any farther than to a line parallel with the forearm; while flexion is more free than natural, as the wrists can be bent to considerably more than a right angle.

The existence of the deformity in both wrists, the history, and the actual examination sufficiently prove this to be a case of congenital dislocation. It presents some characteristic differences from most of the other reported cases. For instance, there is less concomitant deformity, such as extreme shortening of the forearm, fixedness of position, malformation of other parts, etc. In many other cases the congenital dislocation seems to be only part of a more or less general defect of development; but this is one, as nearly as may be, of congenital dislocation pure and simple; hence its great interest in an anatomical and surgical point of view.

Of course at her present age this patient is not a fit subject

for treatment. As to whether at an earlier period any treatment would have been advisable, I defer giving an opinion until such a case falls under my observation. No plan of treatment, so far as I know, has ever been recommended.

The accompanying illustration, from a photograph, shows tolerably well both the deformity of the wrists and the shortening of the forearms.



FOREIGN CORRESPONDENCE.

My Dear Yandell: LONDON, March 15, 1880.

We have now fairly realized the grim significance of that horrid fog-cloud which floated lazily but murderously over London. One week the deaths were sixteen hundred over the average, the next week seven hundred, and the third two hundred over the corrected average. That is the list of killed; what is the number of the injured who survive is not known and can not well be estimated. The experience of capillary bronchitis afforded during that fog and the next succeeding weeks will not easily fade out of the mind. The prostration which has followed the battle for life has been very serious. However, it is very unlikely that the conditions of atmospheric stillness and dryness which rendered that death-dealing fog-cloud possible will not recur readily. Nor will this be a subject of regret to any one. The demand for stimulating expectorants to enable the patients to drag the air through these obstructed fine bronchia was urgent in the extreme, and the results of their free administration very encouraging; and the lessons learned during this exceptional fog will exercise a permanent influence upon our practice.

"The occurrence of inflammation of the veins of the lower extremities, consequent on severe injuries to the head, is a remarkable and curious complication which has not, so far as I know, been described or even noticed by any surgical writer," says H. G. Croly, Senior Surgeon to the City of Dublin Hospital; and he then describes two cases. The one was a gentleman of thirty-five who was pitched from a car on the 18th of October, 1878. There was hemorrhage from the left ear with vomiting of blood, and effusion into the mastoid region with consequential facial paralysis. There was no injury to the lower extremities. Consciousness was soon restored, but the hemorrhage continued for several hours. The head symptoms gradually subsided, and in a month the convalescence was so far

established that the patient desired to leave his bed. On the 20th of November he complained of acute pain in the left groin and thigh, and the inguinal glands became enlarged and very hard and painful to the touch. The pulse rose from 64 to 100, and the temperature was 100° F. The foot became swollen and painful, and the entire limb edematous; indeed, presented the usual phenomena of phlebitis. For ten days the temperature stood at 100° and the pulse at 100. In thirteen days both pulse and temperature were normal. On the 7th of December the patient complained of pain in the right leg; the leg was swollen up to the knee, but not above; the femoral and posterior tibial veins were hard and painful, and the posterior tibial artery could not be felt behind the internal ankle. There were also severe rigors and perspirations. The leg was elevated, leeches applied to the groin, hot sedative applications and linseed poultices resorted to locally, and anodyne draughts exhibited internally. Then friction with careful bandaging with flannel rollers, with quinine and a nutritious diet, followed. The patient gradually and slowly recovered, the left leg remaining swollen and edematous for weeks; and ultimately he could walk as well as ever, and regained perfect health.

The second case was that of a young lady who was thrown violently from her horse against an iron gate—a severe scalp wound, laying bare portions of the right parietal, frontal, and temporal bones, being the result. In addition to the usual symptoms she had intense pain in the nape of the neck. The case progressed satisfactorily for three weeks, when a severe rigor came on, which was followed by acute pain in the left inguinal region, extending down the thigh to the leg and foot. The femoral vein was hard and exquisitely painful, and the limb became swollen and edematous. There were severe rigors, and the pulse and temperature rose. The same line of treatment was adopted as in the preceding case, except the leeches, and the patient slowly recovered from the phlebitis. She had, however, a sharp attack of pleurisy, and later on erysipelas attacked the scalp wound. The lady has recovered her health very materially, but

the affected limb remains still heavy and weak, and portions of the veins hard and wooden to the touch. This condition of the veins has been benefited by the repeated application of vesicatory collodion.

Mr. Croly submitted the notes of these cases to Messrs. Erichsen, Bryant, and Prescott Hewitt, who agreed with the view he had taken of the cases. Mr. Erichsen wrote: "The cases of phlebitis following injuries to the head that you mention are most interesting, and certainly deserve record. They doubtless belong to the same category of secondary blood changes that reach their culminating point in abscess of the liver as a sequela of head injuries. But as affecting the veins of the lower extremity they must be rare, as I do not recollect to have met with or to have heard of a case of the kind."

The subject of "private lunatic asylums" has been ventilated lately by Dr. John C. Bucknill, late Lord Chancellor's Visitor in Lunacy. Dr. Bucknill went straight to the heart of the subject by discussing "the principle of profit" entailed by such institutions. He said the laws relating to insanity had come down to us from times when insanity was thought to be something apart from disease, and that these laws had been patched from time to time as crying needs demanded, but had never been materially altered. The operation of these laws tended and still tends to sequester the insane from the care and attention of the profession at large, and to render more perplexing, dangerous, and difficult the medical treatment of any single case of lunacy. It herded lunatics together so that they could easily be visited and accounted for, and created a class of men who can be made responsible to the authorities for the confinement and detention of the insane according to certain regulations, but whom they do not and can not make responsible for their medical treatment. What is the effect, beneficial or mischievous, of this herding of lunatics together, was no part of his inquiry. He then proceeded to contrast the proprietor with the practitioner in relation to asylums. He pointed out that of ninety-eight private asylums in England and Wales forty-nine (just one half) were in

the hands of medical men. "Moreover, of the asylums licensed to medical men the proprietors of many of the most important ones are capitalists, or speculators, or trustees, or inheritors, or hilt-deep mortgagees to whom they are not licensed and whose names do not appear." This statement, of course, as might be expected, has evoked some angry comment upon Dr. Bucknill; for which, however, I dare say, he cares very little. He draws a line between the medical practitioner, whether paid by fee or salary, and the proprietor who possesses no medical knowledge. He points out how the profit is derived by the patient's detention, and consequently the tendency for patients to be detained after their recovery on the grounds of the possibility of relapse. He pointed out cogently that the fees of medical men are charges for work and skill made upon and paid by voluntary agents; whereas the profit of a private lunatic-asylum proprietor is that portion of the payment which is in excess of the cost, and which is great in proportion to the diminution of the cost and valuable in proportion to its continuance. He quoted the words of that "clear thinker and bold speaker," the late Mr. Wakley, the proprietor of The Lancet during the stormy years of its early life, in the House of Commons in 1841: "I entreat the House to observe the operation of the laws as regards lunatics. Suppose I have a relative who is possessed of a large fortune. I perceive certain eccentricities in the conduct of that individual. From the great affection I have for that relative, and the still greater affection I have for his property, I cause a commission of lunacy to be issued out, and, discovering him to be insane, place him in confinement. Then what motive of action is given, under the present system, to the person in whose charge that lunatic is placed? Why, it calls into operation the principle of selfishness common to human nature. The proprietor of the asylum will argue that he gets four hundred pounds a year for the charge of the gentleman so long as he remains under that roof; and if he recovered then he (the proprietor) would lose that annual amount. Suppose an honorable gentleman were to go to a doctor and say, 'My liver is diseased, and

so long as it remains so I will give you a hundred pounds a year!' what motive in such case would be given to the doctor?"

He did not wish to say one word about asylum management, but to refer to the unchanging and it is to be feared unchangeable principles which underlie human activities, and to the amount of that profit depending upon what these individuals choose to expend upon the comfort and enjoyment of their inmates, and its continuance upon the duration of the disease or what they choose to think its duration. "May I not," he says, "fairly ask you to consider what can possibly justify the existence of those institutions for private imprisonment, owned and kept by private people, lay and medical, male and female, there being nothing like a parallel instance in which the liberty of Englishmen is submitted to such control? In former times indeed debtors were permitted to be kept in durance by sheriffs' officers; but a sheriff's officer was not quite a private individual, and the thing was felt to be a scandal and abolished."

He is very warm upon the abuse of the claim of apprehension of a relapse. "Perhaps I may be wrong in the opinion that under the best treatment and the most auspicious circumstances patients do not often attain to perfect recovery in asylums any more than they do in fever hospitals. The last touch of treatment wanted is the cordial restorative of home or the tonic of liberty. But do not the proprietors of asylums too often recognize the persistence of symptoms of insanity in patients who appear to us to have recovered which no one else can observe? If the matter were not too sad and serious I could amuse you by descriptions of the manner in which I have myself been kept at bay in my diagnosis of recovery; for although upon sufficient evidence you may make up your mind with certitude as to the existence of mental disease, it requires great pains and patience and knowledge of your people to avoid being misled as to the possible existence of symptoms which you may not be capable of observing or of denying. Suppose, for instance, that the proprietor tells you that your patient, who appears to have recovered, has had a slight stroke, with a little facial palsy and some

slight mental obfuscation, which passed off the day before yesterday; or that he has had two or three slight epileptic seizures, and has been a little fierce and angry just after them; or that he hears voices at night and denies them in the morning; upon what principles of diagnosis are you to determine that the gentleman is not drawing upon his invention for his statements, and that he will not be inconsolable should the relapse occur which he assures you he is anticipating?"

Dr. Bucknill freely admitted that among asylum proprietors there were honorable men who did their best to cure their patients, who freely let their patients depart when a change would be to their advantage, who cared less for profits than results, and where the asylum was somewhat like a lunatic club, where the residence of the patients was to a great extent voluntary, and whose excellent practice went far to redeem a bad system.

His remedy is state control. From that principle there must be no flinching. Asylums should be provided by the state and managed by boards of governors. Harmless lunatics, by singles, twos, or threes, ought to be under open medical care with domestic life around them. "The idea of making every thing smooth and easy for official visitation reached its climax in a proposal that for the convenience of commissioners every asylum should be close to a railway station." Such ideas must be replaced by wider views of official duty. The present complicated supervision ought, too, in his opinion, to be simplified. Go on, good experienced Dr. Bucknill, until you have shaken the foundations of proprietary asylums until their owners quit them as do rats a sinking ship.

As might have been anticipated, the strictures of Professor Spence on Listerism, or rather on the personal experience of Professor Lister himself, have not long remained unchallenged. He says Mr. Spence never paid him the compliment of personally watching him operate, and that what he knows must be from hearsay; and that the worse operator he is, the better his system of treatment, if such good results are attained by him. That is a fair if hard blow. Mr. Lister makes the important statement,

"Soundness of the excretory organs becomes a matter of much less essential moment when septic agencies are entirely prevented from entering the organism through the wound, and therefore do not require to be eliminated from the system." This is in reference to a case of Mr. Spence where an amputation of the thigh proved fatal from "albuminuria from scrofulous kidney." Mr. Lister then contrasts their two several experiences in amputations of major importance, and writes, "It thus appears that even in my lame hands the application of the strict antiseptic principle has led to results surpassing those attained in a specially-selected period by an excellent surgeon who prides himself upon his success in the department of amputation, but who has not adopted the principle." He then pointed out that their experience was certainly in the same hospital, but not under the same hygienic circumstances, as his wards were more crowded than Mr. Spence's; "and further, the annual cleaning of the wards which took place, I believe, under all the other surgeons was for three years omitted in my department, because, while the perfect healthiness of the wards rendered it unnecessary, the process entailed a risk of injury to individual cases in moving them from place to place." Then as to the use of the spray in amputation of the breast he says: "The general course of such cases has been one of absence of suppuration or febrile disturbance, not only after removal of the gland and dissecting out the entire contents of the axilla, but also with a degree of traction of sutures to approximate cutaneous margins, when a large amount of integument has been taken away, such as it would be out of the question to employ except under strict antiseptic management; for it is remarkable how much dragging upon the skin may be practiced with impunity if the excitement and swelling due to septic inflammation be avoided. Stitches, instead of cutting their way out quickly, as would otherwise be the case, retain their places till cicatrization is complete, the integument gradually yielding and accommodating itself to its altered circumstances." He also speaks of twenty-six operations performed upon ununited fractures without a fatal result,

solid osseous union being ultimately attained in all the cases but two where the femur was the seat of injury. In referring to those three hospital pests—pyemia, erysipelas, and hospital gangrene—his wards in the Glasgow Royal Infirmary "entirely lost their unhealthy character coincidently with the adoption of strict antiseptic treatment." He also had almost entire immunity from hospital disease during the five years he was in Edinburgh, "though under very unfavorable general hygienic conditions." Mr. Lister then points to the behavior of a blood-clot in an open wound under the antiseptic treatment—how it retains its appearance unaltered till it bleeds when touched with a knife; to the fact that wounds in healthy joints treated antiseptically "remain not only without suppuration, but free from uneasiness, tenderness, puffiness, or inflammatory blush, while the general health is unaffected."

It is quite clear that the advocacy of the antiseptic treatment is in competent hands so long as Mr. Lister lives to defend it, and I am glad to say there exists no indication whatever that that able advocate is in any way likely to be silenced prematurely.

Reviews.

Minor Gynecological Operations and Appliances, for the Use of Students. By J. Halliday Croom, M.B., M.R.C.P.E., F.R.C.S.E., etc. Edinburgh: E. & S. Livingstone. 1879.

This is a handsomely-printed duodecimo of rather more than one hundred pages, fully and worthily dedicated to Prof. A. R. Simpson, whose assistant Dr. Croom formerly was—a volume designed to give students a practical account of the more common gynecological operations and appliances. We know nothing better of this sort as to contents and form of presentation. The illustrations, which include two plates of chromo-lithographs, are generally very good. Nevertheless there is a wood-cut on page 29, intended to represent the application of Sims's speculum, that does not strike us as quite accurate. We see a forlorn female figure, not entirely nude, indeed neither shoeless nor shiftless, with apparently a life-preserver under her head, while her lower limbs are half-stretched out as if in the act of swimming, and the supposed couch or table on which she is resting might easily be mistaken for a small section from some calm body of water like Loch Katrine. Fortunately the wood-cut is labeled, and no such mistake as to its meaning need be made.

Malaria and its Effects. By J. W. Young, M.D. Fort Wayne, Ind.: Page, Taylor & Co. 1880. 8vo. Pp. 22.

Some men are afflicted with ideas—crude, incomplete, famished ideas—which they persuade themselves are the perfection of knowledge for which the world must suffer sadly until they

are promulgated, and they write them and have them printed. This pamphlet had this origin. The author says: "I now refer to one of the most immortal truths known to medical science—a truth upon which has been expended many of the profoundest labors of the tallest minds that have adorned the medical profession. The poison of malaria, unlike the 'germ,' is not an hypothesis. We know the laws of its habitude, and we know its habitude as well as we know any thing in nature's widespread and overarching domain. . . There is nothing in all the etiology of diseases with which we are so well acquainted as we are with malaria." These statements, thus made, the author appears to think sufficient to induce us to accept them as demonstrated truths.

The contents of the pamphlet are like unto this quotation. It may be well for the author to rid his mind of the perilous stuff, but it is not worth while for any one to waste his time in reading it—except a book-reviewer. J. F. H.

On the Internal Use of Water for the Sick, and on Thirst: A Clinical Lecture at the Pennsylvania Hospital, October 25, 1879. By J. Forsyth Meigs, M.D., one of the Attending Physicians at the Hospital. Philadelphia: Lindsay & Blakiston. 1880. Pp. 54.

Prof. Meigs gives some reminiscences of the general professional apprehension of the mischievous effects of drinking water in acute disease that obtained say thirty-five years ago. He relates some painful instances, and no doubt every physician of such years of experience could add others equally affecting. The writer remembers that when a student his preceptor attended a young man with inflammation of the bowels, to whom water was denied by the doctor; but so intense and agonizing was the patient's thirst that he exacted from the doctor a promise that if it became certain that he must die he should be allowed to drink all the water he desired. Accordingly when the

time came the doctor told his patient there was no hope of his recovery, and to drink as much water as he wished. The young man at once drank to satiety and—recovered.

Dr. Meigs's lecture is full of instruction, and practitioners as well as students may find in it much of value that they should constantly remember. During the author's professional life the ideas of the profession concerning water, and especially drinks in acute illness, have undergone a revolution; and he approves the revolution, and narrates the change in an agreeable manner for our profit and pleasure. J. F. H.

A Text-book of Physiology. By M. Foster, M. A., M. D., F. R. S., Prelector in Physiology and Fellow of Trinity College, Cambridge. With illustrations. Third edition, revised. London: MacMillan & Co. 1879.

The distinguished author of this work died, we believe, since the issuing of this third edition. The book outlives the man. True in this instance, but not true in all; not true either when the entire duration of the book-life is brought in comparison with that of the man-life. A medical book, even when successful, rarely lives more than twenty or thirty years. But let us neither moralize nor mourn at the inevitable.

Foster's Physiology is a most excellent book, not only for the student, but especially for the physician who wishes to revise and increase his physiological knowledge. The style of the author is clear, his arrangement and classification of subjects very satisfactory, and he has presented in this volume a most valuable exposition of physiology as now known. It need not be added that the publishers present this book to the profession in quite handsome form. The publishers state that a cheap "student's" edition will soon be issued.

A Treatise on the Science and Practice of Midwifery. By W. S. PLAYFAIR, M.D., F.R.C.P., etc. Third American edition, revised and corrected by the author, with notes by ROBERT P. HARRIS, M.D. With two plates and one hundred and eighty-three illustrations. Philadelphia: Henry C. Lea. 1880.

Playfair has become quite a favorite with the American profession, as is shown by the fact that the second American edition was exhausted before the corresponding English edition. It justly deserves the favor it has received. Not so large a volume as Leischman, probably it is more acceptable to many readers. It certainly is an admirable exposition of the Science and Practice of Midwifery. Of course the additions made by the American editor, Dr. R. P. Harris, who never utters an idle word, and whose studious researches in some special departments of obstetrics are so well known to the profession, are of great value. Three editions of a medical book in less than four years is sufficient testimony of its high appreciation by the American profession.

The Study and Practice of Medicine by Women. By JAMES R. CHADWICK, M.D., Boston, Mass. New York: A. S. Barnes & Co. Pp. 28.

This brochure is merely a narrative of the struggles of women in the various civilized countries of the world to get a medical education through medical colleges, and for recognition as medical practitioners when they proved themselves worthy of that distinction. Hundreds of educated women are now practicing medicine, and thoroughly organized and equipped schools and institutions for the instruction of fresh recruits for their ranks are within reach of all aspirants. J. F. H.

Clinic of the Month.

THE ASPIRATOR IN RETENTION OF URINE.—Dr. W. O. Roberts records (Louisville Medical News) the following cases of retention, three of which were due to organic stricture and two to enlarged prostate, in which he used the aspirator:

1. S. P., aged twenty-eight, had suffered for several years from organic stricture. After exposure to a cold rain one afternoon he had great difficulty that night in voiding his urine, and the following morning had complete retention. At noon of the same day, when I saw him, his sufferings were intense. Attempts at catheterization had produced false passages, with oozing of blood from the meatus. I immediately used the aspirator, and drew off twenty-four ounces of urine. No further attempts at catheterization were made; the urine was drawn off twice daily for three days with the aspirator, when I had no difficulty in passing a No. 6 gum instrument.

2. Saw, with Drs. Cowling and McEvoy, a man, aged seventy, who had had great difficulty in passing urine for several days, with complete retention for thirty-six hours. The bladder formed a tumor in the abdomen the size of a cocoanut. There was great general prostration. Attempts at catheterization failing, the aspirator was used, and a quart of dark, bloody-colored, fetid urine drawn off. Patient died of uremic poisoning in eight hours after the operation.

3. G. H., aged thirty, came to my office at 8 o'clock P. M. to be relieved of a distended bladder. He had been the subject of organic stricture for five years; whenever exposed to severe cold or drank to excess had retention of urine; was generally able to relieve himself with a No. 6 gum catheter, but this time had utterly failed. He had been drinking beer very freely all the

afternoon. Finding that in his attempts to pass the catheter he had greatly lacerated his urethra, I immediately used the aspirator and drew off about twenty ounces of urine. Directed the patient to go home and keep warm in bed with hot applications to his perineum. The following morning he was able to void urine as well as usual, and I saw nothing more of the case.

4. Saw with Dr. McDonough a case of retention of urine due to enlarged prostate in a man sixty-eight years of age. The patient had suffered with difficulty in passing urine for a long time. A year previously had retention for twenty-four hours, which was relieved by a catheter. Had not passed urine for forty-eight hours, when he sent for Dr. McD. The doctor found the bladder unusually distended, rising as high as the umbilicus. Failing to introduce a catheter, he sent for me to aspirate. I drew off one hundred and twenty-six ounces of urine. I was unable to see the case again until the following morning, twenty-four hours from date of last visit, when we got seventy ounces. We were to have seen him again that evening, but learned that he had died at 2 P. M., his death being a very quiet one.

5. Was asked by Dr. L. P. Yandell to see Mr. C. H., aged forty-five, who was suffering intensely from retention of urine. Had had organic stricture since a young man, but never before suffered from retention. Was in the last stages of consumption, and unable to lie down on account of excessive coughing and a feeling of suffocation. By his own attempts at catheterization in the sitting posture he had produced laceration of the urethra, followed by considerable hemorrhage. By soaking the penis in hot water he succeeded in voiding a small quantity of urine only. I insisted upon the use of the aspirator, but he refused, giving as his reason that he believed he would be able to "soak it" all out during the night, and that he would rather "die in the attempt" than have the needle stuck into his belly. Early the following morning, however, I was called in great haste, and on my arrival found him in such agony that he immediately consented to aspiration. When the needle was introduced he remarked that it caused much less suffering than the attempts

at catheterization had done. Twenty-three ounces of urine were drawn off, to the patient's great relief. This case is still under treatment, and has been aspirated so far six times.

Malarial Hemicrania.— Dr. C. A. Bryce, of Richmond, Va., reports the following case which seems to have been relieved by dextro-quinine after other remedies had failed: "Chas. Lankford complained of headache in the right side of his head and through the right eye. His sight was imperfect while suffering from the pain; the attacks were worse every other day; his nose would bleed very often when he was troubled with the headache. I prescribed quinine, iron, and hyoscyamus; no improvement, but an increase of the head trouble and hemorrhage. I then gave quinine alone without benefit, and then gave ergot and bromide potassium; this checked the hemorrhage to some extent, but the headache and imperfect vision remained. Three-grain doses of dextro-quinine three times a day after the second day entirely and permanently relieved the hemicrania; the eyesight became perfect; the bleeding from the nose has occurred but once since. The patient could not take quinine without producing unpleasant cerebral congestion and nose-bleed. Dextro-quinine obviated this difficulty and effected a cure."

Alkalies in Anemia.— Dr. W. Nicholson, of Greenwich, writes in The Practitioner that he considers the connection between the alkalies and anemia a very important one. He also thinks derangements of the liver are a most frequent source of anemia; that, in a word, there is a hepatic anemia—that is, an anemia produced by hepatic disorder; and he thinks this form of anemia is remarkably common — in fact, the commonest form—and that all cases of anemia, without any apparent cause, are hepatic. Then he expresses his belief that the alkalies, especially potash, have a beneficial action on the liver, which action tends to restore the blood to its normal character. And finally, he thinks that the alkalies ought to take the place of iron in the treatment of anemia. Dr. Nicholson's favorite is the bicarbonate

of potash, which he is in the habit of prescribing in twelve- to twenty-grain doses four times a day to individuals continuously for months, if necessary, with great benefit in the majority of cases; and those cases in which potash has failed have generally turned out to be cases of serious organic lesion or of tubercle, over which therapeutics have little control. In anemia he finds the best results from potash from the beginning to the end of the disease, and by it he hopes to cure most of the cases he treats, unless due to tubercle or secondary to some incurable lesion. There is, in Dr. N.'s opinion, no peculiar or mysterious depressing action about the alkalies; but he admits that when given continuously for long periods the patient or the patient's stomach may sicken at them, the same that it might do against any other monotony. If this be correct we can easily understand how the alkali, although doing a great deal of good, may have to be discontinued if the stomach turns against it. When we come to consider, it is very few things that the stomach can tolerate continuously. Ten or twelve articles will nearly exhaust the list of foods that can be taken daily, and many articles considered luxuries are, if given daily, stomachic bores. He attaches a great deal of importance to combining the spirits of chloroform with the alkali, as it certainly covers the taste, warms it, and generally makes it better borne by the patient.

Cowpox.— Mr. Ceely and Mr. Badcock thirty years ago proved that by inoculating cows with matter taken from the vesicles of smallpox a condition is produced in the cow which corresponds precisely with the cowpox of Jenner, and that matter taken from such vesicles so induced in the cow produces on the arm of the infant all the ordinary effects of cowpox lymph, and is in fact indistinguishable from cowpox. In other words, it follows from their experiments that the cowpox of the cow does not in any respect differ from and probably is nothing else than secondary smallpox inoculated on the cow and running a course modified by the constitutional character of the animal; and again, that vaccination is nothing else than the induction in the

infant of smallpox of a kind modified by the fact that the smallpox virus has passed through the cow, and that under those circumstances it has become very largely minimized in its violence, while it does not cease to afford protection against ordinary smallpox. This view is, however, contested by M. Chauveau, of Lyons, who, in a series of experiments upon the cow, failed to produce the same effects as Ceely, Badcock, Green of Birmingham, and others have succeeded in producing here.

M. Chauveau published a report upon this subject, known as the Lyons Report, in which he declares that if you inoculate a cow with smallpox, and take the matter again from the cow and invaccinate it upon the human subject, you produce not vaccinia in the child, but ordinary smallpox, or that which tends to be ordinary smallpox; and he altogether dissents from the view that cowpox and vaccine smallpox are the same. This view has been strongly adopted here by Sir Thomas Watson, a physician whose name always carries very great weight, and he has lately put it forward again. It did not, however, find much favor at the recent meeting. On the contrary, some curious facts were pointed out which strengthened very much the view of Ceely and Badcock that what is called cowpox is nothing else than human smallpox inoculated in the cow.

Thus it was observed that in Jenner's time, when smallpox was very prevalent among the milkers in the vale of Aylesbury and elsewhere, cowpox also was very common; but now that smallpox is rare in that district, and generally in the rural districts extremely rare, and now that sanitary care makes it almost impossible for persons with smallpox vesicles still on their hands to be intrusted with the duty of milking cows, cowpox has practically disappeared; so that for several years large rewards have been offered for the production of cases, without the effect of producing one such case.

Again, it is pointed out that one hears always of cowpox and never of bullpox, and the vesicles appear always on the udder, the part handled by the milkers. No example can be suggested of a disease common in a genus and communicable from one to

the other, such as cowpox should be in the Watsonian view, which does not affect the male as well as the female. Scientifically also, if, as is undoubted, the matter taken by Ceely and Badcock from healthy cows inoculated with smallpox, and in whom this inoculated smallpox had produced vesicles; if, moreover, such matter when re-inoculated into children produces vesicles which in their appearance, in their course, and in their result are identical with ordinary vaccine vesicles such as Jenner describes as being the result of cowpox, and as are now seen when the matter is still used; if this be granted it is not easy, I say, to understand by what argument it could be maintained that there is any specific difference between the matter of Badcock and the matter of Jenner. Nevertheless Sir Thos. Watson, although unwilling, owing to age and infirmity, to argue the question further, maintains his belief and holds to the view that cowpox is the inoculated grease from the horse, and that its occurrence on the cow is clear by the fact that the persons who attended the horse are those who milked the cow, and that the rarity of the occurrence of cowpox is probably due to the improved care of the horse and the resulting rarity of grease among horses.

I must confess that in my view the strength of the argument lies altogether with those who believe in the identity of cowpox with human smallpox inoculated into the cow; and this also was Jenner's own belief.

Great credit is given to Dr. Martin, of Boston, for the pains which he had taken to introduce animal vaccination into America. (London Correspondent of Louisville Medical News.)

For Burns and Scalds, one of the best but least known agents is oil of peppermint. Applied by pencil or cloth to the wound, it gives prompt ease from pain and leads to a rapid cure without scars. Previous to its application the burnt part may be kept under water. It is sometimes advisable to dilute it one half with glycerin. (*Allgemeine Wiener Zeitung.*)

THE PROXIMATE CAUSE OF ORCHITIS.—M. Despres read before the Académie de Médecine a communication on this subject. The following are his conclusions: 1. Orchitis is due to the retention of spermatic fluid in the testicle. 2. The cause of the retention of the spermatic fluid is not always to be found in the same spot, but it is more than probable that the swelling of the mucous membrane of the ejaculatory ducts and of the vas deferens, or even congestion of the prostate or of the lining membrane of the urethra, are the ordinary causes of the retention. 3. The appearance of orchitis in gonorrhea—from the tenth to the twentieth day—coincides with the functional activity of the testicle. The more active the state in which the organ is the sooner will the orchitis show itself after the beginning of the urethritis. 4. Orchitis produced by a wound or by irritation of the urethra can be explained by a tumefaction of the wounded parts, and particularly by a tumefaction occurring at the level of the ejaculatory ducts and of the vesicula seminalis, and arresting the flow of the spermatic fluid into its natural reservoirs. (La Revue Médicale.)

COLD AND HOT WATER IN POST-PARTUM HEMORRHAGE.—An ordinary syphon-syringe is the only instrument required, though we now use one with a long vulcanite nozzle specially constructed for vaginal and intra-uterine injection. This is carried up to the fundus, and with the usual precautions against injecting air and securing a free return we inject water as hot as can be conveniently borne by the hand—that is, 112° F.—in a full stream into the cavity, continuing thus until a good contraction is secured and the water returns quite clear and colorless.

The following are some of the results of our experience in the use of hot water:

1. In cases of sudden and violent hemorrhage in a strong and plethoric woman it is better first to use cold.

2. Where, from the prolonged or injudicious use of cold, the patient is found shivering and depressed, the beneficial effect of injecting hot water is rapid and remarkable.

3. In nervous, depressed, and anemic women hot water may at once be injected without previously using cold.

4. In cases of abortion, where from uterine inertia the ovum, although separated from the uterine wall, is wholly or in part retained, the injection of hot water is generally followed by most satisfactory results.

5. Where the injection of the perchloride of iron is considered necessary previous injection of hot water clears the uterus of clots, etc., permitting the fluid to come directly in contact with the bleeding surface, and lessening the chance of septic absorption. (Dr. Lombe Atthill, in Dublin Jour. of Med. Science.)

PRECOCIOUS HYSTERIA.—M. Ad. Henrot (*Gazette Obstetricale*) reports a case of precocious hysteria. The patient, twelve years of age, suddenly and without known cause had convulsive paroxysms with suffocation, cough, hysteric cry, and esophageal spasms. The attacks were frequent, and had continued for twelve days. Her expression was good, and there was nothing in her general state indicative of serious trouble with her nervous system. All sorts of antispasmodics had previously been used without benefit. Henrot decided to try very energetic means—means which he had seen succeed in several similar cases. At the first nervous attack in his presence he struck her as severely as possible with a towel dipped in cold water. The attack soon ceased, and did not return. Henrot states that hysteria is not altogether exceptional in persons at twelve, though ordinarily it is observed at from fifteen to twenty-five.

THE AUDIPHONE.—Messrs. Sharp & Sons have been carefully testing the audiphone for several weeks, but thus far they have not found any patients benefited by it. Out of one hundred and fifty successive cases of deafness in which they have given it a trial they report that not one single one has noticed any benefit in its use. (Chicago Medical Journal.)

Notes and Queries.

A New Code of Ethics.—Under this caption our able neighbor, the Louisville Medical News, writes: "Boston, it seems, is to have a new Code of Ethics. What its particular features are have not yet transpired; but we see there has been quite a row over the matter before the councillors of the Massachusetts Medical Society at its winter meeting. There was a majority report and a minority report, standing four to one, and the minority report was finally adopted. The debate on the matter of course brought out some curious expressions. Dr. Bowditch said of the majority report that in a practice of fifty years he had seen nothing so derogatory to the profession. Dr. Ellis said that for thirty years he thought he had practiced among gentlemen, but if the majority report be true he had been mistaken. Dr. Bigelow, who wrote the minority report, said the majority report was medieval, prehistoric. He said too that the important point to be covered, and which was not covered, was to prevent physicians from stealing patients; but then he added further along that he did not "wish the public, especially the lawyers, to know that he belonged to a club in which it was found necessary to make a law to the effect that members shall not steal spoons." Dr. Williams said that codes were intended not to present the terrors of the law, but as instruction to youth; for which Dr. J. Collins Warren, the editor of the Boston Medical Journal, in behalf of the young men, for whom so much solicitude had been exhibited, returned thanks; but he expressed desire to be without a code, averring that the society had lived peacefully for a hundred years without such an instrument. Dr. Clarke thought if a man had not a sense of honor and instincts of courtesy that "this mass of information" would not implant them.

He had submitted the code to an eminent jurist, who said he was surprised that such rules were found necessary. Dr. Wright objected to both codes; and so on and so on, the debate waxing quite warm.

It is a pity that we have n't had the code itself, so as to judge of its merits, and must confine ourselves to remarks made about it. It will be curious to see how the brethren in the Hub have arranged for a new set of rules. Some of the expressions used in the debate might perhaps—that is to say, possibly—apply to a certain set of laws adopted by a national medical society for a country not quite so extensive as Boston. We would not dare to say so, however; for in these parts the Code of Ethics is a thing rather dangerous to criticise, especially in the presence of those who have never read it or acted upon it.

The minority report of Dr. Bigelow is spoken of as a model of conciseness and effectiveness, and we hope it will soon be made public. If there ever should come a time when men brave enough to revise our very ancient law shall arise, it will be well to have a pattern to go by. Meanwhile we shall of course watch with interest the workings of the new code, and strive to learn if in its territory doctors are more loving, forgiving, and forbearing from one another's pastures than they are in other parts of this necessitous world.

Death of Dr. Wm. S. Chipley.—On the 11th day of February, 1880, the venerable mother of Dr. Chipley expected to commemorate the anniversary of her birth, this being her ninety-first year. She had issued a number of invitations to her relatives and friends to meet her on this joyous occasion, little dreaming of the great catastrophe that was to cover the pleasant scenes with the pall of death—the death of her only son. He died on the 11th day of February.

The death of such a man as Dr. Chipley must be looked upon as a calamity both to the public and the profession. He was graduated in the Medical Department of Transylvania University in the spring of 1832, and he removed from Lexington,

Ky., to Georgia. He speedily commanded an excellent practice, but with an earnest devotion to the interests of Mr. Clay he soon became involved in the political contest then raging in Georgia. He approved himself as a capital stump-speaker, and with several of the leading statesmen of Georgia, among whom was the Hon. A. H. Stephens, he made a very effective canvass. But the cause which he advocated failed before the nation. He determined then to abandon the political field and to devote himself exclusively to his profession. He returned to Lexington and again speedily commanded a large practice. Great and beneficent changes had been made in the insane asylum at Lexington, mainly through the peerless labors of Dr. Edward Jarvis, who presented his pleadings in such a cogent form that he produced general conviction in behalf of improved methods of surveying and managing the entire subject of mental alienation. Dr. Chipley took up the subject and studied it under the new lights that had been let into this interesting field. He was appointed to take charge of the asylum, and the conviction became general that the superintendency was given to the right man. Henceforth he devoted himself with heart and mind to the management of mental alienation and nervous disorders akin to it. Without neglecting the general interests of the medical profession, he made insanity and kindred disorders the great object of study and observation. He speedily won distinction in this branch of study, and in the annual meetings of the managers of insane asylums he honorably won his way into the foremost ranks of the devotees of this specialty. His contributions to psychological literature commanded great attention, and won for him the confidence of those who were devoted to questions of this character. He visited Europe to survey the time-honored institutions of that region that managed all the forms of mental maladies, and in France and England he gathered rich stores of the experience of the great minds that made mental alienation an object of daily and thorough study. But he also compared his own results with the revelations of Europe, and found himself amply confirmed in his own con-

victions. Under his enlightened views he made many and important changes in the asylum, and he conducted it with great economy and the most gratifying success.

After leaving the Eastern Asylum he opened a private institution for the treatment of nervous disorders, and he soon commanded public confidence for this private institution. But his buildings were not suited to his views, and upon the call of the Cincinnati Sanitarium at College Hill, Hamilton County, Ohio, he removed to that point and was very successful in that institution. It speedily grew under his management into importance. And there, to the close of nearly his seventieth year, he labored industriously and assiduously in this his great vocation. He was singularly equipped for this great work. He was a calm, quiet, patient, but very firm man. His studies embraced every thing that was known on the subject of mental alienation and nervous disorders. A discriminating judgment of singular felicity presided over all his work. These equipments serve to account for the great success that attended upon his labors in this department.

On the 13th of February the remains of Dr. Chipley were conveyed from the Cincinnati Sanitarium to Lexington, Ky., for burial in the beautiful cemetery in that city. Notwithstanding the inclemency of the weather, an immense assemblage of people were at the funeral services, testifying their respect for the memory of one who had spent a long life in their midst in services to humanity of the highest interest.

Sir Wm. Gull commenced as a bottle-washer in the drug-room of Guy's Hospital. His father was a laborer who tilled a small plot of ground adjoining the hospital. (Western Lancet.)

Dr. John Neill, Emeritus Professor of Clinical Surgery in the University of Pennsylvania, died on the 12th of February, after a long and painful illness. Dr. Neill was born in Philadelphia in 1819 of a family which has included several eminent medical men, of whom his father, Dr. Henry Neill, at one time

President of the College of Physicians, is best known. As a lecturer, in his best days Dr. Neill was unusually successful, and was particularly distinguished for the originality and profuseness of practical illustration. He was the joint author, with the late Prof. F. Gurney Smith, of "Neill and Smith's Compendium."

THE Texas State Medical Association will meet at Brenham, Washington County, Tuesday, April 6th.

THE St. Louis Medical College announces that hereafter all students who matriculate at that institution must take a three-years' graded course in order to graduate.

A LETTER has been received from Mr. D. G. Brinton, of Philadelphia, alleging that certain errors were contained in a recent notice in this journal of the Biographical Dictionary of Physicians. We regret that the letter and *amende* can not appear until our next issue.

MEDICAL COLLEGE COMMENCEMENTS.—*At Indianapolis:* The Medical College of Indiana held its second annual commencement exercises on February 27th. The degree of medicine was conferred on sixty-one applicants. Dr. John Chambers, Professor of Anatomy, delivered a well-prepared valedictory to a large and intelligent audience.

The Central College of Physicians and Surgeons at its first annual commencement, February 25th, awarded diplomas to eleven gentlemen and one lady. This college, although so young, is holding a spring course of lectures.

At Louisville: The number of graduates from the several medical schools in Louisville at the last commencements is as follows: University of Louisville, 95; Louisville Medical College, 56; Hospital School of Medicine, 33; total, 184.

Commencement Exercises of University of Louisville, Forty-fourth Session: The Commencement Exercises of the University of Louisville, Medical and Law Departments, were held in Public Library Hall on the afternoon of February 27th, in

presence of an immense audience. The following was the programme for the occasion:

Prayer by Rev. E. T. Perkins, D.D.

Salutatory by Woodford Hector Dulaney, jr., of Kentucky, member of Junior Law Class.

Conferring the degrees, M.D. and LL.B., by Hon. Isaac Caldwell, President.

Conferring the prizes of the Medical Department by the President.

Medical Class Valedictory by Ambrose McCoy, of Tennessee.

Law Class Valedictory by Oleonder H. Pollard, of Kentucky.

Address to Alumni, Law Department, by Shackelford Miller, Esq., of Louisville, Ky.

Valedictory by Prof. Jas. S. Pirtle, of Law Department.

Valedictory by Prof. Lunsford P. Yandell, of Medical Department.

The following formed the roll of honor of the medical class:

Richard Maupin Ferguson, M.D., of Kentucky.
P. H. Kempf, M.D., of Indiana.
Wellington A. Post, M.D., of Illinois.
John H. Maull, M.D., of Indiana.
Ambrose McCoy, M.D., of Tennessee.
Walter E. Scott, M.D., of Kentucky.
George D. Posey, M.D., of Kentucky.
Robert J. Swain, M.D., of Texas.
William L. Ward, M.D., of Texas.
Richard J. Leonard, M.D., of Indiana.

In the contest for honors, which was unusually severe, consisting of written examinations which occupied several days, it was found upon opening the mottoes that Messrs. Ferguson, of Kentucky, and Kempf, of Indiana, had tied for the first place, and it was deemed better that they should divide the highest honor rather than renew the trial. To each of these gentlemen was therefore awarded the Yandell Memorial Medal, which marks the first honor of the school. The second medalist was Mr. Post, of Illinois, and the third was Mr. Maull, of Indiana. In the Undergraduates contest, on all subjects except Practice, Surgery, and Obstetrics, open to first- and second-year men, the first prize—a case of surgical instruments offered by Messrs. Arthur Peter & Co., wholesale druggists of Louisville—was

awarded to Mr. Hoskins, of Kentucky; the second prize—a copy of Erichsen's Surgery offered by Messrs. John P. Morton & Co., publishers—was awarded to Mr. J. Morris Ray, of Kentucky; the third prize—a case of surgical instruments offered by Mr. Simon N. Jones, of the Louisville Pharmacy—was awarded to Mr. J. H. Hensley, of Indiana.

The degree of Doctor of Medicine was conferred on the following gentlemen, ninety-five in number:

B. L. Applewhite, Tex.
Henry F. Askam, Ohio.
Phil. G. Beutel, Ky.
Zadok W. Casey, Ark.
J. M. Curtis, Miss.
John P. Deckard, Ill.
M. C. Ellis, Miss.
John T. Flanagan, Ky.
M. B. Garrett, Tex.
Wm. B. Hardwick, Ala.
Joseph S. Hume, Ky.
Myra S. Iseman, S. C.
James H. Johnson, Tex.
Richard B. King, Ky.
Wm. H. Lewis, Mo.
Charles D. Lilly, Ky.
E. G. Magruder, Tex.
David M. Morrow, Tenn.
Ambrose McCoy, Tenn.
F. S. McRady, Tenn.
Robert F. Peak, Ky.
Wellington A. Post, Ill.
E. M. Smith, Miss.
James W. Squires, Ky.
Jas. B. Slaughter, Ind.
Sam'l E. Schofield, Tex.
Sam'l H. Singleton, Ky.
James W. Stone, Ky.
James M. Tinsley, Ky.
J. A. Westerfield, jr., Ark.
Jesse J. Wells, Tenn.
Lorenzo L. Webb, Tenn.
Isaac W. Amerman, Ill.
John E. Baugh, Tenn.
Benj. F. Berry, Mo.
Wm. R. S. Connell, Ks.
D. P. Custis, Md.
Robt. L. Douglas, Ala.
Andrew H. Evans, Ky.
Wm. J. Feland, Tex.
Chas. W. Hardin, Ky.
E. S. Hawkins, Tenn.
Walter W. Holloway, Ky.
Emery C. Jones, Ind.
Hiram R. Kennedy, Ala.
Wm. T. Lampton, Ind.
Rich'd J. Leonard, Ind.
John A. Long, Miss.
John H. Maull, Ind.
John H. McIntosh, La.
L. R. McCormick, Ind.
W. M. Murchison, Tenn.
Henry M. Pusey, Ky.
Daniel D. Rose, Mich.
J. Sol. Smith, Ky.
Thomas O. Staples, Ky.
James W. Snider, Ky.
Benj. S. Story, La.
Joseph M. Swope, Ill.
Walter E. Scott, Ky.
Solon L. Vaughan, Ark.
William L. Ward, Tex.
Duncan I. Watson, S. C.
Chas. S. Williams, Ky.
Geo. D. Armstrong, La.
George Beard, Ky.
Wm. C. Brown, Tenn.
J. W. Crewdson, Ky.
Henry C. Coty, La.
John L. Durham, Ind.
R. M. Ferguson, Ky.
Rich'd E. Garnett, Ky.
Allen R. Hancock, Ind.
Jesse K. Hayes, Ky.
Alex. W. Holland, Ks.
Leander O. Jones, Ky.
Paul H. Kempf, Ind.
Wm. P. Lafollette, Ind.
Wm. C. Lehr, Miss.
Harry V. Lucas, Ky.
Wm. J. Moss, Miss.
P. H. McKinnie, Tenn.
Benj. McCloskey, Ky.
W. B. Paynter, Ind.
George D. Posey, Ky.
James A. Smith, Ga.
Joseph A. Schenck, Ark.
Frank C. Simpson, Ky.
Wm. V. Saul, Miss.
Robt. J. Swain, Tex.
Rich'd H. Stevenson, Ky.
Wm. F. Toombs, Miss.
J. S. Westerfield, Ark.
Felan S. White, La.
James E. Wall, Tex.

UNIVERSITY OF LOUISVILLE.—Two hundred and fifty students attended the forty-fourth course of the Medical Department of the University. The spring session commenced on Monday,

March 8th. An unusual number of students is in attendance on this course, which is the usual supplementary course given by the colleges of the American Association.

MODERN MEDICINE—A VALEDICTORY ADDRESS DELIVERED TO THE GRADUATING CLASS OF THE UNIVERSITY OF LOUISVILLE AT THE CLOSE OF ITS FORTY-FOURTH SESSION, BY PROF. LUNSFORD P. YANDELL, M. D.

A common regret of the ambitious youth at that period when the ripening and expanding mind begins seriously to contemplate life is that he was not born in an earlier era of the world, when the unknown abounded and the glories of discovery were likelier of achievement. This repining is fostered by the daily discourse of the elders whose knowledge and wisdom he has been taught profoundly to revere, and who are forever decrying the present and magnifying the past, and whose psalm of life expresses a perpetual longing for the good old times when saints and sages and seers abounded and there were giants in the earth.

But intercourse with books and men, as the youth advances in maturity, throws a different light on the pages of life. He learns that though the mountains are ever crumbling and diminishing under the corroding hand of nature as it piles upon them the ice and snow of winter and pours down on them the rains of summer, and though the oceans are ever growing shallower as the ceaseless rivers bear to them the debris of the wasting lands, he also learns that mankind degenerates not, neither is static like the inferior animals, which are without inherent power to elevate themselves above their progenitors. He learns that the longevity and strength and stature of his race to-day are greater than at any previous period. He sees depicted in the paintings and marbles and bronzes of the ancients the highest type of female beauty extant when these works were fashioned by the hand of genius; and it is certainly no exaggeration to affirm that female beauty to-day, judged by these records, is of a higher type than the world has ever known. The unaided eyes of the modern astronomer are able to perceive stars that were invisible to the earlier students of the heavens. The brilliant conduct of our late terrible internecine war demonstrated that in martial skill and courage the race is not degenerate, and subsequent events have proved us possessed of an admirable conservatism and sublime patience unequaled in history.

To the aspirant after fame and usefulness therefore there is nothing discouraging in the outlook of life to-day. The present is far

more glorious than the past, but the possibilities of the future seem grander still. There is yet abundant work to do, and there is untold honor within the reach of him who is earnest in the labor of life.

The profession which you have entered is one of the most serious and important as well as fascinating branches of natural history, and the investigation of it is an ever-enhancing pleasure to its faithful student.

Medicine, like the other so-called liberal professions, divinity and law, has received its share of sarcastic criticism from the wise and thoughtful as well as from the idle and ignorant, and it would be foolish and dishonest to pretend that in the past medicine has been wholly blameless.

Doubtless many lives have been lost through lack of medical knowledge and skill, and many have been sacrificed to what was inaptly called heroic treatment, the result of false theories made current by the misled minds of brilliant writers and teachers.

But our profession is rapidly coming to the knowledge that science means measurement, that theorizing is but guessing, and that bedside investigation in private practice, in hospitals, and in dispensaries is the only reliable source of therapeutic knowledge, especially in the hospitals and dispensaries, the true laboratories of medicine. We are unceasingly collecting useful vital facts on which is building the science of medicine, and before which the alluring but obstructive and harmful speculations of the past are rapidly fading.

In the lectures which you have heard from me at the University you have not been asked to believe any thing which can not be proved. On the contrary you have been urged to cultivate a wise skepticism, not only concerning ancient dogmas, but also as to modern discoveries. You have been told that error, false doctrine, and ignorance abound in our profession, and you have been earnestly advised diligently to search out the truth. You have been admonished to accept nothing blindly from teachers or books, no matter how plausibly presented or eloquently enforced.

You will hear it denied, both in and out of our profession, that medicine has yet any claim to be considered a science. You will be told that beyond a very limited number of specific remedies the practice of medicine is uncertain, unscientific, and empirical. My own views, as you have elsewhere learned, are widely different from this. I believe that medicine has indisputable claims to a place among the sciences. I believe that we are already possessed of the means for the prevention or cure of the majority of human maladies. The chief obstacles in carrying our knowledge into practice are the ignorance,

bigotry, poverty, and perversity of mankind. I will enumerate a few examples of what the science of medicine has done and can do.

Leprosy and the plague, loathsome diseases, once abundant and dread scourges of the race, are now almost unknown in the more highly civilized countries. It is a curious fact that the former* ceases to be hereditary when brought to America, and the latter has never been seen within our boundaries. By food and ventilation and drainage these things have chiefly been accomplished.

Scurvy, a century since, on land as well as on water, annually carried off thousands. Most physicians to-day have never seen this destructive disease, and we know that it is absolutely preventable and curable by proper food and treatment.

Smallpox, less than a hundred years ago, invaded every family in Great Britain, depopulated whole neighborhoods and towns, and it was the exception to the rule for any one to escape this loathsome and disfiguring fever. To-day it is seldom encountered, and when man wills it it may be thoroughly eradicated. This is due to vaccination.

Syphilis devoured and disfigured thousands of victims even within the memory of your teachers. To-day we know that it is curable beyond peradventure.

Inflammatory rheumatism, a painful and dangerous malady, which until of late defied all treatment, or at least the treatment of which was utterly uncertain and unsatisfactory, we now cut short within a few hours or days, and seldom fail to cure by the salicylates.

Epilepsy, the disease of the gods and the disease of the devil, as it was once called, which often leads to homicidal mania, kleptomania, and idiocy, is to-day curable, or greatly mitigable in many if not most instances by the bromides and atropine and the constructives.

The same is true of spasmodic asthma, an affliction excruciating beyond description; and also of sick-headache, and a host of spasmodic affections.

The untoward events of the puerperal state, and those connected with surgical accidents and operations, are proved to be to a great extent preventable and curable by quinine and hygiene.

The myriad manifestations of the malarial poison which the ancients aptly typified in their awful water monster, the hydra, are now preventable and curable to an almost unlimited extent. Few persons to-day realize the terrible scourge which malaria once was. Formerly it swept from the face of the earth every year its thousands of victims. No class of society escaped its ravages. More than one royal person-

*So says Dr. J. Nevins Hyde, of Chicago.

age perished by this poison, and the great Cromwell died of a plain intermittent or remittent fever.

Scrofula in its innumerable forms, embracing, as I believe, all the varieties of consumption, though still the most abundant and prolific cause of human death, we now know how to prevent to an almost unlimited extent had we the power and the money to enforce proper hygiene. My confident belief is that consumption, under favorable circumstances, is curable in most instances, and this through the digestive and assimilative functions by means of constructives, nutritives, and the like.

Skin-diseases from time immemorial have been a reproach to our profession. The great John Hunter said of them: "They are of three classes. One of these is cured by sulphur, the other by mercury, and the other the devil himself can't cure." But you have learned that no diseases are more amenable to treatment, are more certainly and promptly and satisfactorily curable than those of the skin.

Obesity and emaciation are to-day in very many cases remediable. The uncomely and inconvenient proportions of the former are without danger reduced by diet and destructives to comfortable comeliness, and repulsive attenuation, it has been shown,* may, by recumbent rest, oleaginous inunctions, electricity, and massage, be made to give place to delightful rotundity.

Cancer, we are beginning to believe, we possess a remedy for in arsenic; and it is probable that in the bromhydrate of quinia we have a cure for hooping-cough. Our present positive knowledge of the antidotes and tests for poisons must not be omitted in this connection.

Through the science of medicine the deaf are made to hear, the blind to see, cripples to walk; the insane are restored to intellectuality, and the idiot brain is developed into comparative usefulness.

The triumphs of surgery are simply enormous. The suffering assuaged and the lives saved by lithotomy, lithotrity, tracheotomy, and ovariotomy, by Sayre's plaster jacket, Esmarch's bandage, Davy's lever in hip-joint amputation, Martin's elastic bandage, and by anesthetics, and by medicines acting on certain tissues or organs of the body are incalculable. Twenty thousand years of health, usefulness and happiness have been added to the lives of English women by the ovariotomies, now numbering nearly a thousand, done by Mr. Spencer Wells alone. This operation, as you know, originated in Kentucky.

The diseased heart, and head, and lungs, and spleen, and kidneys,

* By Dr. Wier Mitchell.

and liver, and other important organs are to-day frequently restored to health by skillful surgery.

These are some of the facts on which the claim is based that medicine is truly a science.

The nations have their codes of law and the churches have their creeds. The science of medicine does not yet possess any acknowledged code or creed of universal belief, and there is a wide diversity of opinion and practice in the profession. The following propositions, however, I venture to offer as demonstrable truths:

The causes of disease are few, though its varieties are many.

Diseases should be treated with reference to their cause and without reference to their locality. This is equally true of the conditions called fever and inflammation. The exceptions are rare.

Malaria is the most abundant source of acute, and is often the source of chronic, disease.

Scrofula is the most abundant source of chronic, and is often the source of acute, disease.

Malaria and scrofula often coexist, each intensifying the other. They frequently coexist with other diseases, thereby greatly augmenting their danger.

Alcohol is a fruitful source of disease, and produces morbid changes singularly like those of malaria.

The other sources of disease with which we are acquainted are mal-hygiene, the contagia, rheumatism, catarrh (cold), scurvy, epizooa, entozooa, vegetable parasites, mineral and vegetable poisons.

For most of the entozooa, epizooa, and vegetable parasites, and for many poisons, we possess satisfactory remedies.

For the contagious and infectious diseases we yet possess no preventive, save isolation, except in the case of smallpox, and no specific, no positive cure, except for syphilis.

But in all these diseases the physician by his wisdom and skill may save many lives. For the catarrhal fevers and inflammations I believe we may claim in opium and aconite and that class of medicines antidotes or at least remedies of great curative power.

You will observe that I have said nothing of the germ theory of disease, or of antiseptic therapeutics. I have no faith in either, though the majority of the profession to-day are believers in both.

Pathological investigation proves that there is no such thing as an absolutely healthy man, and we have not yet remedies for all his ills. It is our business to discover these cures.

Our science is far from perfect, and there is a vast deal yet to be discovered. It is no less true that a vast deal has to be unlearned in

our profession, and in both directions the greatest results are to be expected from the younger men.

To unlearn is more difficult to the old than to learn is to the young. It has been wisely said that it is hard for men to think that worthless which as youths they have toiled to acquire. Nothing truer was ever uttered, and this is an enormous obstacle to the advancement of science.

Hume cites a striking instance of this when he says that not a physician in the British Isles who had attained the age of forty ever accepted Harvey's great discovery of the circulation of the blood, but on the contrary adhered through life to the absurd errors imbibed in early days. It is recorded that Harvey's standing as a physician was seriously injured by the promulgation of his novel views. His cotemporaries cried him down, calling him a visionary, a theorist, a hobbyist, an impractical man, and a dangerous doctor. It is to be hoped that the profession to-day is less bigoted, fogyish, obstinate, and conceited than it was in Harvey's time. I believe it is so, and, indeed, very much so, and yet there is wide room for improvement.

I am loth to believe that those of us who have passed forty are incapable of accepting that which is new, if it be demonstrably true. But if we are thus incapable the sin is our own, and the sin is the result of cerebral inertia.

The wise horticulturist produces perfect and abundant fruit on the old tree by judicious management. The successful farmer by honest work and liberal feeding maintains or increases the fertility of his acres; and so the great physician, by a life of thoughtful study of disease at the bedside and in books, by intercourse with earnest, thinking, learned men, by patient and perennial labor, may maintain his intellectual vigor and usefulness to the end of a ripe and mellow old age.

A WORD AS TO THE MATERIAL OF WHICH DOCTORS ARE MADE.

Of the mature nations of the world England is the greatest and grandest, and yet one of her greatest and grandest sons has said, "Her population is thirty millions, principally fools." This is a declaration pregnant with thought, for most that is good and great in America comes from our English-speaking ancestors.

The children of Jonathan resemble marvelously and unmistakably in their moral, physical, and intellectual characteristics their grandfather, John Bull.

The medical profession is made of the same clay and is cast in the same mold as the rest of the human family.

One of the most brilliant members of our profession in Europe, in a late letter in the Louisville Medical News, speaking of one of the departments of medicine, uses this strong language, "The great stolid mass of British surgery." The writer is a wise man who knows whereof he speaks, and yet he writes of Englishmen, men who are certainly the peers of their brethren in any portion of the world.

Shall I be considered as unpatriotic and unmannerly when I declare it as my belief, founded on a somewhat extensive acquaintance with the profession in both countries, that in brain-weight and brain-work we in America are not altogether and unlimitedly superior to our cousins across the sea? No, the plain truth is, gentlemen—and I believe it wise and well to tell it to you on the threshold of your career, unpalatable though it may be both to you and to your elders—the mass of American physicians is inferior to the profession in Europe in scholastic attainments if not in ambitious devotion to the science of medicine. At the same time it is perfectly true—and every American is proud to declare the fact—that the past, and especially the present, of our profession abounds in names famous throughout the world, and in natural intellectual power and practicality the American doctor is surpassed by none.

THE BUSINESS OF MEDICINE.

So far I have spoken to you of the scientific aspect of our calling; but as most of you are dependent on your work for food as well as fame, it is important that you should look at it in other aspects.

The practice of medicine, viewed in a purely business light, is the practice of men, and on your manners and management, I am sorry to say, more than on your mind, are likely to depend your early pecuniary success.

The same methods that are successful with the politician and the drummer in gaining votes and securing buyers will bring you business. Every city, town, village and neighborhood furnishes examples of this. But you, as honorable physicians, are debarred from soliciting, from seeking, from cultivating business by these means, no matter how excusable or even commendable they may be in other occupations. Capacity, energy, integrity—in a word, worth—will, in the long run, secure you success.

Be patient, be gentlemen, and abide strictly by the Code of Ethics, and you will win. You have been honored to-day by being received as members of a great profession, and you should now determine to make yourselves great men in this profession, to become leaders and not to remain in the ranks. Resolve to rise above the mass of your

fellows. It is a fact full of cheer for you gentlemen beginning life, that fame and riches are nowhere in the world so readily acquirable as in America; but I trust this information will not diminish your ardor.

During the illness of your patients the science and sentiment of your profession should occupy your thoughts; but when the case is terminated the important matter of business comes in, and you should demand a just reward for your services promptly and fully. The negligence and timidity and indolence of physicians in the business of medicine are the source of their proverbial poverty. People are influenced in their estimate of the value of our services by our own apparent estimate of their value.

An indefensible and humiliating custom—long extant, but now diminishing—is in speaking of our patients as patrons instead of as clients. An independent man and a gentleman is never patronized. If you are willing to have patrons you are unworthy to be doctors. The profession of medicine is no place for dependents and toadies. Your fees are your rights, and their collection is necessary to the maintenance of your health and happiness and the welfare of your family.

THE CANT OF MEDICINE.

There is a vast amount of cant and rubbish written and talked on occasions like this, and on many other occasions, about the nobility, the charity, the purity, the integrity, the philanthropy of physicians. I have not perceived that any honest avocation ever changed a man's nature. We of medicine are as good as our fellows in other occupations, but no better.

"Away with this canting about great motives. Let us not be too proud and fancy ourselves martyrs of the truth—martyrs and apostles. We are but tradesmen working for our bread and not for righteousness' sake. Let us try and work honestly, but do not let us be prating pompously about our sacred calling." This incisive admonition from the cynical but sincere Thackeray to his fellow-authors, through the mouth of one of his characters, I earnestly commend to you, barring, of course, the use of the term "tradesmen" in its offensive European sense, remembering that in our free country honor and social position are not the inherent or inherited property of particular occupations or castes, but are the dues if not always the reward of personal merit.

THE SENTIMENT OF MEDICINE.

A few more thoughts—and they shall be very brief—and I have done. Sentiment is inseparable from humanity, and sentiment is very beautiful and useful, and well in its place; but it is one of the banes

of our profession, and predominates to-day to a lamentable extent to the detriment of its science and business.

An eccentric old physician once said to me, "The life of a doctor is a hard one if he gets practice, and a deal harder if he does not." Fortunately our pecuniary emoluments are not our only recompense. Our cures are not done by drugs alone, neither is our reward only in money. The confidence, the affection, the devotion which the physician's grateful clients feel for him and show toward him, and the consciousness, as he looks about him and back over the past, that he has saved this sainted mother from death, and has snatched that beautiful child from the grave's brink, and has kept yonder great and good father from going into the dark valley—this is a wealth, these are riches of value inestimable, of which only the men of our art can ever know.

Graduates of the University of Louisville, rest assured you carry with you wherever you may go the best wishes of the Trustees and Professors of your Alma Mater. May you bear the standard of the science you have espoused further and higher than you found it, may you win the honorable admiration of your professional brethren, and may you deserve and receive the gratitude of your fellow men. Farewell!